

MINERALOGICAL ABSTRACTS

Volume 24 - Index
1973

Editor
R. A. HOWIE

Indexer
E. M. B. YOUNG

U. I. C. C.
NOV 4 1974
LIBRARY

U. I. C. C.
NOV 4 1974
LIBRARY

PUBLISHED JOINTLY BY
THE MINERALOGICAL SOCIETY OF GREAT BRITAIN AND THE MINERALOGICAL SOCIETY OF AMERICA
LONDON 1974

Annual Subscription for four numbers and index, Post Free, \$36 (U.S.): £14.00

MINERALOGICAL ABSTRACTS

COMMITTEE OF MANAGEMENT

Mineralogical Society of Great Britain

R. W. B. NURSE, *Chairman*

J. E. T. HORNE, *Secretary*

A. H. WEIR, *Treasurer*

B. R. YOUNG, *Publications Manager*

Mineralogical Society of America

J. V. SMITH, *President*

JOAN R. CLARK, *Secretary*

P. M. BETHKE, *Treasurer*

ORGANIZATION OF ABSTRACTS

Arising from a decision taken at the meeting of the INTERNATIONAL MINERALOGICAL ASSOCIATION in Copenhagen in 1961 the Mineralogical Societies of America and Great Britain agreed to issue a joint statement to National Societies adhering to the Association inviting each Society to organize contributions of abstracts of papers published in the journals of its country on subjects relevant to *Mineralogical Abstracts*. This invitation was issued and has brought a ratifying response. Members of Societies which have agreed to co-operate in this way are entitled to receive *Mineralogical Abstracts* for their personal use at a reduced rate of subscription in application which must be made through their National Society. The countries now co-operating include: AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CZECHOSLOVAKIA, DENMARK, EGYPT, FINLAND, GERMANY, INDIA, ISRAEL, ITALY, JAPAN, NETHERLANDS, NEW ZEALAND, NORWAY, PAKISTAN, PORTUGAL, SPAIN, SWEDEN, SWITZERLAND. Individual mineralogists and petrologists in countries not represented in the Association, or not yet co-operating through their National Society, provide abstracts from the literature of ARGENTINA, BRAZIL, KENYA, MEXICO, and SOUTH AFRICA.

ABSTRACTORS

Contributors to this volume of *Mineralogical Abstracts* are:—

Aires, C. A. de Matos (M.A.), *Portugal*; Arem, J. E. (J.A.), *U.S.A.*; Atkins, F. B. (F.B.A.), *Gt. Britain*; Ball, D. F. (D.F.B.), *Gt. Britain*; Barnum, B. E. (B.E.B.), *U.S.A.*; Bellis, W. H. (W.B.), *U.S.A.*; Berg, R. B. (R.B.B.), *U.S.A.*; Blank, H. R. (H.R.B.), *U.S.A.*; Boray, A. (A.B.), *Turkey*; Botinelly, T. (T.B.), *U.S.A.*; Bush, A. L. (A.L.B.), *U.S.A.*; Butler, B. C. M. (B.C.M.B.), *Gt. Britain*; Cadaj, J. A. (W.A.C.), *Austria*; Challis, G. A. (G.A.Ch.), *New Zealand*; Chisholm, J. E. (J.E.C.), *Gt. Britain*; Dávidova, Š. (S.D.), *Czechoslovakia*; de Waal, S. A. (S.A.d.W.), *South Africa*; Dimmock, G. M. (G.M.D.), *Australia*; Dunham, A. C. (A.C.D.), *Gt. Britain*.

Eason, K. L. (K.L.E.), *U.S.A.*; Ehlmann, A. J. (A.J.Eh.), *U.S.A.*; Elsdon, R. (R.E.), *Ireland*; El Shazly, E. M. (E.M.el S.), *Egypt*; Embey-Istzin, A. (A.E-I.), *Hungary*; Fejer, E. E. (E.E.F.), *Gt. Britain*; Ferguson, R. B. (R.B.F.), *Canada*; Ford, R. J. (R.J.F.), *Australia*; Frisch, T. (T.F.), *Canada*; Gait, R. I. (R.I.G.), *Canada*; Goodwin, R. H. (R.H.G.), *U.S.A.*; Gude, A. J. (A.J.G.), *U.S.A.*; Hall, A. (A.H.), *Gt. Britain*; Hallberg, J. A. (J.A.H.), *Australia*; Harmer, W. C. E. (W.C.E.H.), *Switzerland*; Hartman, P. (P.H.), *Netherlands*; Henderson, M. B. (C.M.B.H.), *Gt. Britain*; Henley, K. J. (K.J.H.), *Australia*; Hey, M. H. (M.H.H.), *Gt. Britain*; Hiemstra, S. A. (S.A.H.), *South Africa*; Hooker, M. (M.H.), *U.S.A.*; Howie, R. A. (R.A.H.), *Gt. Britain*; Hudson, D. R. (D.R.H.), *Australia*; Hügi, Th. (Th.H.), *Switzerland*; Hutchison, R. (R.H.), *Gt. Britain*.

Jacob, R. E. (R.E.J.), *South Africa*; Japan, Min. Soc. (M.S.J.), *Japan*; Jarkovsky, J. (J.J.), *Czechoslovakia*; Johnson, L. R. (L.R.J.), *Gt. Britain*; Keeling, J. L. (J.L.K.), *Australia*; Kempe, D. R. C. (D.R.C.K.), *Gt. Britain*; Kempster, C. J. E. (C.J.E.K.), *Gt. Britain*; Koděra, I. (M.K.), *Czechoslovakia*; Kopp, O. C. (O.C.K.), *U.S.A.*; Kubach, I. (I.Kb.), *Germany*; Kühn, R. (R.K.), *Germany*; Kurzweil, H. (H.K.), *Austria*; Le Bas, M. J. (M.J.Le B.), *Gt. Britain*; Lewis, J. D. (J.D.L.), *Australia*; Logan, C. T. (C.L.), *South Africa*; Love, L. G. (L.G.L.), *Gt. Britain*; McHardy, W. J. (W.McH.), *Gt. Britain*; McIntyre, V. S. (V.S.M.), *U.S.A.*; Mason, B. (B.M.), *U.S.A.*; Mason, R. (R.M.), *Gt. Britain*; Mazzi, F. (F.M.), *Italy*; Mélon, J. (J.M.), *Belgium*; Middlemost, E. A. K. (E.A.K.M.), *Australia*; Mitchell, R. S. (R.S.M.), *U.S.A.*

Nickel, E. H. (E.H.N.), *Australia*; Oldham, J. W. (J.W.O.), *Gt. Britain*; Olsen, E. (E.O.), *U.S.A.*; Pabst, A. (A.P.), *U.S.A.*; Parker, R. B. (R.B.P.), *U.S.A.*; Parsons, I. (I.P.), *Gt. Britain*; Persson, L. (L.P.), *Sweden*; Phemister, J. (J.Ph.), *Gt. Britain*; Pijpekamp, B. V. D. (B.V.D.P.), *Netherlands*; Pipping, F. (F.P.), *Finland*; Richter, D. H. (D.H.R.), *U.S.A.*; Riggs, K. A. (K.A.R.), *U.S.A.*; Rosenqvist, I. (I.Th.R.), *Norway*; Röshoff, K. (K.R.), *Sweden*; Rost, R. (R.R.), *Czechoslovakia*; Rutland, E. H. C. (E.H.C.R.), *Gt. Britain*; Sanero, E. (E.S.), *Italy*; Scharbert, H. B. (H.G.S.), *Austria*; Schmitt, L. J., Jr. (L.S.), *U.S.A.*; Shams, F. A. (F.A.S.), *Pakistan*; Siegrist, M. (M.S.), *U.S.A.*; Soles, J. A. (J.A.S.), *Canada*; Solyom, Z. (Z.S.), *Sweden*; Strens, R. G. J. (R.G.J.S.), *Gt. Britain*.

Tassel, R. Van (R.V.T.), *Belgium*; Tell, I. (I.T.), *Sweden*; Thompson, A. B. (A.B.T.), *Gt. Britain*; Töpper, W. (W.T.), *Germany*; Trembath, L. T. (L.T.T.), *Canada*; Turi, A. (A.Tu.), *Italy*; Walsh, J. N. (N.W.), *Gt. Britain*; Watters, W. A. (W.A.W.), *New Zealand*; Weibel, M. (M.W.), *Switzerland*; Wieseneder, H. I. (H.I.W.), *Austria*; Yaalon, D. H. (D.H.Y.), *Israel*; Young, E. J. (E.J.Y.), *U.S.A.*; Žák, L. (L.Ž.), *Czechoslovakia*.

ERRATA

Mineralogical Abstracts, vol. 13

Abstract numbers

13-418 line 4 *up for* 12AlBO_3 *read* $2[\text{Al}_6\text{B}_5\text{O}_{13}(\text{OH})_3]$

Mineralogical Abstracts, vol. 17

17-390 line 20 *up for* CaB_2O_6 *read* CaB_2O_4

Mineralogical Abstracts, vol. 22

71-1371 *for* $(\text{Bi}, \text{Pb})_4\text{S}_5\text{Se}_4$ *read* $(\text{Bi}(\text{Pb}))_4\text{S}_5\text{Se}$

Mineralogical Abstracts, vol. 23

72-1400 Page numbers, 3-12, 168-171, 186-192, year 1963 *not* 1969

Mineralogical Abstracts, vol. 24

73-396 *for* c 6-825 *read* c 6-852
 73-443 *for* $\text{Åk}_{88}\text{Geh}_{12}$ (line 3) *read* $\text{Åk}_{81}\text{Geh}_{19}$
 73-604 *for* Vb *read* Yb
 73-807 *for* ilmajokite *read* ilmaiokite
 73-1091 *for* stitchite *read* stichtite
 73-1742 *for* Mexcio *read* Mexico
 73-2369 *for* elipidite *read* elpidite
 73-2800 *for* kirschsteinite *read* kirschsteinite
 73-3010 *for* EPENSHADE *read* ESPENSHADE
 73-3266 *for* cumengeite *read* cumengéite
 73-3657 *for* ELVATROSKI *read* ELVATORSKI
 73-4067 *for* cerrusite *read* cerussite
 73-4231 *for* Kirkudbrightshire *read* Kirkcudbrightshire

ABBREVIATIONS AND SYMBOLS

used in the text of abstracts

A.M. .. Mineralogical Magazine : M.A. .. Mineralogical Abstracts : A.M. .. American Mineralogist

CHEMICAL & PHYSICAL CHEMICAL

| | | |
|--|----|-------------------|
| atomic absorption spectroscopy | .. | AAS |
| cation-exchange capacity | .. | c.e.c. |
| chemical analysis | .. | chem. anal. |
| concentrated | .. | conc. |
| differential thermal analysis | .. | DTA |
| dilute | .. | dil. |
| disintegrations per minute | .. | d.p.m. |
| equivalent U_3O_8 | .. | eU_3O_8 |
| ethylenediaminetetra-acetic acid | .. | EDTA |
| heat of formation (absolute temperature subscript) | .. | ΔH_f |
| hydrogen ion conc. acidity | .. | pH |
| insoluble residue | .. | insol. res. |
| isotopes, e.g. | .. | $^{40}Ar, ^{40}K$ |
| loss on ignition | .. | ign. loss |
| milliequivalent | .. | me. |
| microgramme | .. | μg |
| million-years | .. | m.y. |
| neutron activation analysis | .. | NAA |
| not determined | .. | n.d. |
| not found | .. | nt. fd. |
| not present | .. | nil |
| parts per million.. | .. | p.p.m. |
| rare earths | .. | TR or RE |
| standard mean ocean water | .. | SMOW |
| strength of solution, normal | .. | N |
| — — — molar | .. | M |
| substances in ionic state | | |
| anions, e.g. | .. | Cl^-, SO_4^{2-} |
| cations, e.g. | .. | K^+, Fe^{3+} |
| thermogravimetric analysis | .. | TGA |
| trace | .. | tr. |
| X-ray fluorescence analysis | .. | XRF |

CRYSTALLOGRAPHIC & STRUCTURAL

| | | |
|--|----|-------------------------------|
| Ångstrom unit (10^{-8} cm) | .. | Å |
| crystal axes | .. | a, b, c |
| — face indices | .. | (hkl) |
| — form indices | .. | {hkl} |
| — zone indices | .. | [hkl] |
| indices of X-ray diffractions | .. | hkl |
| intensity, | .. | I |
| — relative | .. | I/I_0 |
| interplanar spacing | .. | d |
| mica structural polymorphs | .. | $1M_1, 2M_1$ |
| Siegbahn units | .. | kX |
| space group. These words are written in full | | |
| unit cell, formula units | .. | Z |
| — — repeat distances | .. | a, b, c |
| — — reciprocal lattice lengths of edges | .. | a^*, b^*, c^* |
| — — interaxial angles direct lattice | .. | α, β, γ |
| — — — reciprocal lattice | .. | $\alpha^*, \beta^*, \gamma^*$ |

OPTICAL

| | | |
|------------------------------|----|-------------------------|
| dispersion, e.g. | .. | $r > v$ |
| electron microscopy | .. | EM |
| extinction angle, e.g. | .. | $\gamma : c$ |
| infrared | .. | IR |
| optic axial angle | .. | 2V |
| — — plane | .. | O.A.P. |
| refractive index, in text | .. | refr. ind. |
| — — of isotropic mineral | .. | n |
| refractive indices | | |
| of uniaxial mineral | .. | ω, ϵ |
| of biaxial mineral | .. | α, β, γ |
| scanning electron microscopy | .. | SEM |
| sign of biaxiality | | |
| negative | .. | $2V_x$ or — |
| positive | .. | $2V_y$ or + |
| ultraviolet | .. | UV |

PHYSICAL

| | | |
|--|----|---------------------|
| calculated | .. | calc. |
| calorie | .. | cal. |
| calorie, large | .. | kcal. |
| cycles per second | .. | c/s |
| degree centigrade | .. | $^{\circ}C$ |
| density | .. | D (quote units) |
| — , relative, e.g. | .. | D_4^{20} |
| electron paramagnetic resonance | .. | e.p.r. |
| gramme | .. | g |
| hardness | .. | H. |
| melting-point | .. | m.p. |
| micron (10^{-4} cm) | .. | μ |
| millimicron (10^{-7} cm) | .. | m μ |
| nanometre (10^{-7} cm) | .. | nm |
| natural remanent magnetization | .. | n.r.m. |
| pounds per square inch | .. | lb/in. ² |
| pressure | .. | P |
| soluble | .. | sol. |
| specific gravity, terms of reference not known | .. | sp. gr. |
| temperature | .. | T |
| Vickers hardness number | .. | VHN |
| wavelength | .. | λ |

SYMBOLS

| | | |
|--------------------------|----|-------------|
| approximately equal to | .. | \sim |
| equal to | .. | = |
| equal to or greater than | .. | \geq |
| equal to or less than | .. | \leq |
| greater than | .. | $>$ |
| less than | .. | $<$ |
| not equal to | .. | \neq |
| parallel to | .. | \parallel |
| per cent. | .. | % |
| per mille | .. | ‰ |
| perpendicular to | .. | \perp |
| proportional to | .. | \propto |

ABBREVIATIONS USED IN REFERENCE TO PUBLICATIONS

| | | | | | |
|-------------------------|-------------------------------------|----------------------|-------------------------------------|--------------|---------------------------|
| Abhdl. | Abhandlungen | Geophys., geofis. | Geophysic-al, -s, &c. | Prosp. | Prospecting |
| Abstr. | Abstract, -s | Govt. | Government | Publ. | Publication(s), published |
| Abt. | Abteilung | | | | |
| Acad., Accad., Akad. | Academy, & equiv. | Hdbh. | Handbuch | Razv. | Razvedka = survey |
| Adv. | Advancement | | | Rec. | Records |
| Agric. | Agricultur-al, -e | Illustr. | Illustrat-ed, -ions | Ref. | References, referata |
| Anal. | Analy-st, -tical, &c. | Imp. | Imperial | Rend. | Rendiconti |
| Ann., An. | Annals, Annales, & equiv. | Industr. | Industr-ial, -y | Repb. | Republic |
| Anorg. | Anorganisch | Inform. | Information | Rept. | Report(s) |
| Appl. | Applied | Inst. | Institute, institution, & equiv. | Res. | Research |
| Arch. | Archives | | | Reserv. | Reserves |
| Asoc., Assoc. | Association, & equiv. | Instr. | Instruments | Rescs. | Resources |
| Astron. | Astronomical | Int. | Interior | Rdsch. | Rundschau |
| | | Intern. | International | Rev. | Review |
| | | Invest. | Investigations | Roy. | Royal, & equiv. |
| Bd. | Band | Issl. | Issledovaniye = investigation | | |
| Beitr. | Beiträge | Ist. | Istituto | Sborn. | Sbornik = magazine |
| Ber. | Bericht-e | Izd. | Izdanie = publication | Sch. | School, Schule |
| Berg. | Bergwesen | Izvest. | Izvestiya | Sci. | Science |
| Bol., Boll., Bull. | Bulletin, & equiv. | | | Secl. | Section |
| Bur. | Bureau | Jahresb. | Jahresbericht | Sedim. | Sedimentary |
| | | Jahr. | Jahrbuch | Ser., sér. | Series, & equiv. |
| Ceram. | Ceramic, & equiv. | Jorn., Journ. | Journal, & equiv. | Serv. | Service |
| Chem., Chim. | Chem-i-cal, -stry, & equiv. | | | Sitzb. | Sitzungsbericht |
| Cien. | Ciencia, -s | Khim. | Khim-ie, &c. | Skr. | Skrift, -en, -er |
| Circ. | Circular | Kl. | Klasse | Soc. | Society, & equiv. |
| Cl. | Classe | Krist. | Kristallographie, &c. | Sondbd. | Sonderband |
| Com. | Comisión | | | Spec., spez. | Special, & equiv. |
| Comm. | Commission | Lab. | Laboratory | Stand. | Standard(s) |
| Conf. | Conference, & equiv. | Lit. | Literary | Stn. | Station |
| Congr. | Congress, & equiv. | | | Suppl. | Supplement |
| Contr. | Contributions | Mag. | Magazine | Surv. | Survey, -or |
| C.R. | Comptes Rendus | Mat., Math. | Mathematical, & equiv. | Symp. | Symposium |
| Crist., Cryst. | Crystallograph-ical, -y & equiv. | Medd. | Meddelelser | | |
| | | Mem., Mém. | Memoir, -s, & equiv. | Tab(s). | Table(s), tabelien |
| | | Metall. | Metallurg-ical, -y | Techn. | Technologi-cal, -y |
| Dept. | Department, & equiv. | Min. | Mineralog-ical, -ist, -y | Tids(s)kr. | Tid(s)krift, -en |
| Diss. | Dissertation | Misc. | Miscellaneous | Tijdschr. | Tijdschrift |
| Divn. | Division | Mitt. | Mitteilungen | Trab. | Trabajos |
| Dokl. | Doklady = C.R. | Mh. | Monatsheft | Trans. | Transactions |
| | | Mus., Muz. | Museum, & equiv. | Transl. | Translat-ed, -ion |
| | | | | | |
| Econ. | Economic | Nac., Nat., Naz. | National, & equiv. | U.A.R. | United Arab Republic |
| Educ. | Education | Natur. | Natur-al, -alist, & equiv. | Uch. | Uchenyye = learned |
| Eng. | Engineering | Natur-w, -v. | Naturwissenschaft, & equiv. | Ucheb. | Uchebnyi = teaching |
| Exped. | Expedition | | | Unders. | Undersögelse, undersökn |
| Exper. | Experimental | Obraz. | Obrazovanie = education | Univ. | University, & equiv. |
| Expl. | Exploration | Obshch. | Obshchestva = society | | |
| | | | | Verhdl. | Verhandlungen |
| Fac. | Faculty | Petr. | Petrolog-ical, -y, & equiv. | Vidsensk. | Videnskaps |
| Fig(s). | Figure(s) | Petrol. | Petroleum | Volc., Vulk. | Volcanolog-ical, -y, &c. |
| Fis. | Fiscale, fisico | Phil. | Philosophical, &c. | Vses. | Vsesoyuznyi = All-Union |
| Fören. | Föreningen | Photos. | Photographs | Vyss. | Vysshih = higher |
| Förh. | Förhandlinger | Photomicros. | Photomicrographs | | |
| Fortsch. | Fortschritt, -e | Phys. | Physic-al, -s, & equiv. | Wiss. | Wissenschaft |
| | | Pl(s). | Plate(s) | | |
| Gen. | General | Polytech. | Polytechnic, & equiv. | Zap. | Zapiski = memoirs |
| Geol., géol. | Geolog-y, -ical, -ist, & equiv. | Pract., Prakt. | Practical, & equiv. | Zav. | Zavodskaya = factory |
| Gesell. | Gesellschaft | Proc. | Proceedings | Zaved. | Zavedeni = institution |
| Geo-chem., chim. | Geochemi-cal, -stry, &c. | Prof. | Professional | Zeits. | Zeitschrift |
| Geogr. | Geograph-y, ical, &c. | | | Zhurn. | Zhurnal = journal |
| | | | | Ztg. | Zeitung |

INDEX OF AUTHORS

- ADIAN, M., 73-645
 BEY, S., 73-48, 49, 574, 1735, 270
 DEL AAL, O., 73-4042
 DEL-GAWAD, M., 73-3901
 DULLAH, M. I., 73-2730
 E, S., 73-530, 531
 EL, F., 73-3452
 ERG, G., 73-2191
 LANOV, B. F., 73-1820
 RAHAM, K., 73-665, 4303
 U-ABED, I., 73-2308
 CAD, Y., 73-2162
 HAYULU, K. V. S., 73-4057
 HENBACK, D., 73-3397
 HUTA PANDIT, S., 73-2875
 KERMAND, D., 73-786, 1794, 962, 4016
 KMAN, R. G., 73-3837
 AM, J., 73-2290
 AMIA, SH., 73-3286
 AMS, J. B., 73-2778, 3898
 AMS, J. W., 73-662
 AMS, R. L., 73-96
 AMS, S. J., 73-2268
 DIE, G. G., 73-3568
 E-HALL, J. M., 73-3228
 ERCA, B. M., 73-2536
 EYERI, B., 73-3397
 IB, D., 73-1934, 1939
 IER, I., 73-224, 605, 3889
 MAKIN, L. A., 73-2702
 KADA, J., 73-3903
 USUMILLI, M. S., 73-4070
 ANAS' EVA, E. L., 73-1892
 ANASIEV, M. L., 73-2443
 TAL, F. A., 73-1065
 ASHE, L. V., 73-4155
 IORGHIS, G., 73-655
 RAWAL, B. B., 73-559
 RINIER, H., 73-1940
 TERBERG, F. P., 73-284
 TERDENBOS, J., 73-3337
 UAYO, F. L., 73-1241
 UIRRE, L., 73-852
 URICHS, J. L., 73-1225
 URICHS, J. W., 73-2308
 MAD, M., 73-3398, 3399, 3403
 MAD, S., 73-3326, 3417, 3687
 MAD, SHAKIL, 73-3687
 MAD NEAZ, M., 73-3636
 MED, F., 73-4110
 MED, F. R., 73-1278
 MED, W., 73-1378
 MED, Z., 73-4150
 RENS, L. H., 73-596
 RENS, T. J., 73-419, 3729
 INIAN, N. KH., 73-3957
 LAW, N., 73-3461
 KEN, F. K., 73-3884
 ENSHTAT, Z., 73-3815
 ELLA, J., 73-3736
 HTER, S. M., 73-3644, 4313
 IMOTO, S., 73-1745, 3886
 IMOTO, S.-I., 73-2156
 IMOV, A. P., 73-2689
 SENOVA, L. L., 73-329
 ATYIA, M. J., 73-1727
 BEE, A. L., 73-659, 1795, 2300
 BERS, J. P., 73-1643, 3583, 3594
 BERTI, A., 73-1315
 BRITTEN, L. M., 73-1154
 ALCOVER, J. F., 73-3387
 ALDRIDGE, L. P., 73-141
 ALEKSANDROVA, V. A., 73-2381
 ALEKSEYEV, T. A., 73-1689
 ALEKTOROVA, YE. A., 73-267
 ALÉONARD, S., 73-2447
 ALEXANDER, C. C., 73-3950
 ALEXANDER, E., 73-1283
 ALEXANDER, E. C., Jr., 73-3270, 3963
 ALEXANDRU, H. V., 73-1508
 ALFORS, J. T., 73-3622
 ALFSEN, B. E., 73-1656
 AL-HASHIMI, W. S., 73-2070
 ALI, D. A., 73-3335
 ALI, M. K., 73-3428, 3637, 3639
 ALI, S. A., 73-3827
 ALI, S. M., 73-3521
 ALIETTI, A., 73-1859
 AL-KUFAISHI, F. A. M., 73-3869
 ALLAN, R. J., 73-566, 567, 2308, 3862
 ALLAUDDIN, M., 73-194
 ALLÈGRE, C. J., 73-1751, 2198, 2201
 ALLEN, B. L., 73-180
 ALLEN, G. P., 73-976
 ALLEN, J. C., 73-352
 ALLEN, R., 73-3794
 ALLEN, R. O., 73-70, 3915
 ALLEN, W. C., 73-365
 ALLISON, S. A., 73-1161
 ALMEIDA SAMPAIO FILHO, H. DE, 73-2822
 ALPER, A. M., 73-4129
 AL-QARAGHULI, N., 73-1424
 ALSAYEGH, A. H. Y., 73-3870
 AL-SHAHRISTANI, H., 73-1727
 ALTER, H. W., 73-2298
 ALTHAUS, E., 73-1501
 ALVAREZ, W., 73-2008
 ALYSHEVA, E. I., 73-1430
 AMAOKO-MENSAH, A., 73-1816
 AMBE, Y., 73-2741
 AMBROSE, D., 73-313
 AMELINA, E. A., 73-1068
 AMER, H. I., 73-261
 AMIEL, A. J., 73-2714
 AMIN, M., 73-3521, 3640
 AMIROV, S. T., 73-1314
 ĄMLI, R., 73-1083
 AMOSSÉ, J., 73-1350
 AMSTUTZ, G. C., 73-2299, 2906
 ANANTHARAYANAN, S., 73-894
 ANDERS, E., 73-595, 613, 625, 2300, 2763, 3905, 3949, 3963, 3964, 3966
 ANDERSEN, C. A., 73-2771, 3200
 ANDERSON, A. T., 73-1743, 3895
 ANDERSON, A. T., Jr., 73-3789, 3890
 ANDERSON, B. J., 73-3703
 ANDERSON, B. W., 73-461
 ANDERSON, C. A., 73-428, 2152, 2620, 3621
 ANDERSON, D. E., 73-3989
 ANDERSON, D. H., 73-44
 ANDERSON, D. L., 73-2649
 ANDERSON, D. M., 73-3390, 4029
 ANDERSON, G. M., 73-2551, 3156
 ANDERSON, J. S., 73-96
 ANDERSON, M. M., 73-2223
 ANDERSON, M. R., 73-70, 3915
 ANDERSON, O. L., 73-2045
 ANDERSON, R. N., 73-1195
 ANDERSSON, S., 73-215
 ANDREEV, I. F., 73-407
 ANDREWS, J. N., 73-1714
 ANDREWS, K. W., 73-2288
 ANDREWS, R. S., 73-4266
 ANGINO, E. E., 73-779, 4266
 ANGLIN, M. E., 73-2098
 ANHAEUSSER, C. R., 73-842, 3157
 ANNELL, C. S., 73-590, 600, 601, 1770
 ANNERSTEN, H., 73-2378, 2832
 ANSELM, B., 73-4251
 ANSLEWSKI, J., 73-4022
 ANTHONIOZ, P.-M., 73-2133
 ANTHONY, J. W., 73-1326
 ANTUN, P., 73-3204
 ANTWEILER, J. C., 73-2274, 3620
 ANUFRIYEV, G. S., 73-1733
 AOKI, H., 73-3717
 AOKI, K.-I., 73-2833, 4193
 AOKI, Y., 73-1880
 AOYAGI, M., 73-1109, 2186
 APFEL, R. E., 73-2544
 APPLETON, J. D., 73-2050
 ARAKELIANTS, M. M., 73-3276
 ARAKI, T., 73-1292, 3492, 3501
 ARALINA, A. I., 73-2981
 ARAÑA, V., 73-4212
 ARBEY, F., 73-2790
 ARCHER, A. A., 73-3628
 ARCULUS, R. J., 73-3084, 4170
 AREM, J. E., 73-1585, 4078
 ARIFF, M. R., 73-3832
 ARISTARAIN, L. F., 73-303, 1260, 1471, 1486
 ARISTARIAN, L. F., 73-4077
 ARKIN, Y., 73-2344
 ARMANDS, G., 73-2960
 ARMSTRONG, F. C., 73-3568
 ARMSTRONG, R. L., 73-2008, 2650
 ARNDT, J., 73-2621
 ARNOLD, A., 73-1121, 2125, 2180, 3285
 ARNOLD, M., 73-2299
 ARNOLD, P. W., 73-1233
 ARNOLD, R. G., 73-2585
 ARNOTT, R. J., 73-96
 ARPS, C. E. S., 73-82
 ARRESE, F., 73-1575
 ARRIENS, P. A., 73-17
 ARTH, J. G., 73-1670
 ARTHUR, D. W. G., 73-623
 ARTHURTON, R. S., 73-2077
 ARUSCAVAGE, P. J., 73-71
 ARVIDSON, R. E., 73-622
 ASAAD, F. A., 73-4254
 ASHER, R. R., 73-2745, 2746
 ASHLEY, D. G., 73-2288
 ASHLEY, P. M., 73-1022, 4157
 ASHLEY, R. P., 73-1643
 ASHRAF, M., 73-2339, 3638, 3832
 ASHWORTH, J. R., 73-716, 1798
 ASKVIK, H., 73-1828
 ASLAM, M., 73-3398
 ASPINALL, W., 73-2068
 ASQUITH, G. B., 73-3400
 ASRATKULU, M. A., 73-1314
 ASSAF, H. S., 73-3598
 ASTON, S. R., 73-2697, 4263
 ASTWOOD, P. M., 73-4201
 ASWATHANARAYANA, U., 73-837, 1379, 4353
 ATANASSOV, V. A., 73-2939
 ATHERTON, M. P., 73-2105, 2118
 ATKINS, A. J., 73-2380
 ATTAWAY, D. H., 73-542
 ATWOOD, D. K., 73-2099, 3755
 AUBAKIROVA, R. V., 73-1630
 AUCOTT, J. W., 73-2308
 AUGUSTITHIS, S. S., 73-3356
 AUMENTO, F., 73-696, 1969, 4146
 AUMONT, R., 73-1564
 AUSTIN, G., 73-3422
 AUTHIER, A., 73-1277, 3452
 AUVRAY, B., 73-824, 863, 1119
 AVASIA, R. K., 73-4152
 AVERBUKH, I. O., 73-2975
 AWAN, A. Q., 73-3126
 AYE, U. T., 73-274
 AYLMORE, L. A. G., 73-130
 AYRANCI, B., 73-4211
 AYRES, D. E., 73-3606
 AYRTON, S., 73-1822
 AYYAR, T. S. R., 73-3392
 AZIMOV, SH. YU., 73-407
 AZIZ, A., 73-3634
 AZUMA, K., 73-398
 BAADSGAARD, H., 73-1629, 2226, 3294
 BABCAN, J., 73-3673
 BABIKER, I. M., 73-829
 BABKIN, P. V., 73-1375
 BABU, S. K., 73-791, 4011
 BABU, V. R. R. M., 73-1482
 BABUŠKA, V., 73-3218
 BACHET, B., 73-1940
 BACHINSKI, D. J., 73-1641, 3191
 BACHTIGER, K., 73-2179
 BACK, W., 73-1723
 BACKER, H., 73-3524
 BACKHAUS, K.-O., 73-85
 BACON, M., 73-1951
 BADALOV, S. T., 73-1088, 1634, 1639
 BADALOVA, R. P., 73-1639
 BADAR-UD-DIN, 73-3341
 BADDENHAUSEN, H., 73-3929
 BADHAM, P. J. N., 73-4118
 BADIOLA, E. R., 73-4212
 BADECKER, M. J., 73-533, 1679
 BADECKER, P. A., 73-597
 BAGDASAROV, YU. A., 73-833
 BAILEY, A. C., Jr., 73-4050
 BAILEY, A. I., 73-3464
 BAILEY, D. K., 73-3805, 4089
 BAILEY, G. W., 73-3381
 BAILEY, S. W., 73-4019
 BAIN, D. C., 73-208, 2319
 BAIRD, A. K., 73-3864
 BAKAKIN, V. V., 73-1323
 BAKER, B. H., 73-2055
 BAKER, B. L., 73-1710
 BAKER, D. W., 73-2566
 BAKER, G. F. U., 73-3607
 BAKER, P. E., 73-3101, 4085, 4219
 BAKER, R. A., 73-168
 BAKER, W. E., 73-3546, 3838
 BAKSI, A. K., 73-4179
 BALACESCU, R., 73-3929
 BALASCIO, J. F., 73-2596

- BALASUNDARAM, M. S., 73-3976
BALDOCK, J. W., 73-960
BALDWIN, R. B., 73-612
BALL, M. M., 73-2008
BALLUKAR, A., 73-273
BALSIGER, H., 73-3924
BAMBAUER, H. U., 73-2301
BAMFORD, S. A. D., 73-3065
BANÁS, M., 73-2940
BANCROFT, F., 73-2280
BANCROFT, G. M., 73-3883
BANERJEE, J. C., 73-787
BANERJEE, P. K., 73-2479
BANERJI, A. K., 73-490
BANK, H., 73-459, 460
BANKS, N. G., 73-3297
BANNISTER, M. J., 73-3208
BANO, F. J., 73-2272
BARABANOV, V. F., 73-1343
BARAGAR, W. R. A., 73-508, 2999
BARANOVA, G. I., 73-1833
BARAL, M. C., 73-939
BARBAROUX, L., 73-2075
BARBER, A. J., 73-1057
BARBER, D. J., 73-615
BARDEN, L., 73-1268, 1271
BAREFOOT, R. R., 73-47, 62
BARIAND, N., 73-3266
BARIAND, P., 73-2641, 2926, 3266
BARKER, E. S., 73-3259
BARKS, R. E., 73-362
BARNES, H. L., 73-431, 492, 1554, 1555
BARNES, I., 73-1021
BAROOAH, B. C., 73-538
BARR, M. W. C., 73-2137
BARRACLOUGH, D., 73-4064
BARRER, R. M., 73-1316, 1609
BARRETT, C. S., 73-2627
BARRETT, D. L., 73-3000
BARRETT, P. J., 73-3145
BARRIÈRE, M., 73-3021
BARRON, L. M., 73-309, 2545
BARRONET, A., 73-1603
BARRIOS, E. CARVALHOSA, E., 73-2134
BARSCH, G. R., 73-3215
BARSHAD, I., 73-114, 1232
BARTA, C., 73-1573
BARTELL, L. S., 73-2359
BARTHOLOMÉ, P., 73-757, 2299
BARTLETT, R. W., 73-816
BARTLEY, R. C., 73-1460
BARTNITSKY, E. N., 73-3287
BARTON, A. F. M., 73-821
BARTON, J. M., Jr., 73-2675
BARTON, P. B., Jr., 73-1633
BARTOSHINSKIY, Z. V., 73-3068
BARTRAM, G. D., 73-275, 276
BASHARINA, N. P., 73-2476
BASILY, A. B., 73-3597
BASKINA, V. A., 73-1125
BASSETT, W. A., 73-3672
BASSYUNI, F. A., 73-3596
BASTA, E. Z., 73-192, 261, 703, 4046
BASU, P. K., 73-4366
BATALIEVA, N. G., 73-1295
BATEMAN, P. C., 73-1466, 3053
BATES, R. P., 73-3253
BATES, S. R., 73-2293
BATH, G. D., 73-1961
BAUDIN, G., 73-3781
BAUER, G. R., 73-4171
BAUER, J., 73-1777, 3914
BAUER, YA., 73-2610
BAULEKE, M. P., 73-38, 1074, 1218
BAUR, W. H., 73-216, 222, 2355
BAUSCH, W., 73-1690
BAUTISTA, R. G., 73-3663
BAXTER, J. L., 73-992
BAXTER, J. W., 73-3650
BAYLISS, P., 73-347, 789, 1335, 2733
BAYRAKOV, V. V., 73-682
BAZAROVA, T. YU., 73-518
BAZLEY, R. A., 73-2081
BEACH, A., 73-925, 4307
BEALL, A. A., Jr., 73-3426
BEALL, J. J., 73-2041
BEALS, C. S., 73-1757
BEAMISH, F. E., 73-1191
BEAVAN, C. H. J., 73-2652
BEBIEN, J., 73-2680
BECKER, W., 73-2291
BECKWITH, P. J., 73-2819
BEDFORD, R. E., 73-3664
BEDOGNÉ, F., 73-1085
BEG, M. I., 73-3126
BEGEMANN, F., 73-1761
BEGER, R. M., 73-1871
BEHRENS, E. W., 73-1686, 3814
BEINROTH, F. H., 73-1261
BEISING, R., 73-1518
BELENITSKAYA, G. A., 73-1644
BELIN, C., 73-1574
BELL, H., III, 73-2237
BELL, H. B., 73-3698
BELL, J. D., 73-2036, 3093
BELL, J. S., 73-2008
BELL, P. M., 73-2773, 2778
BELL, P. R., 73-3930
BELL, S. A., 73-3327
BELL, W. L., 73-3474
BELLIERE, J., 73-4326
BELLON, H., 73-4
BELOKONEVA, E. L., 73-2428
BELOUS, I. R., 73-2475
BELOUSOV, A. F., 73-2677
BELOV, N. V., 73-237, 1294, 1295, 1314, 1320, 2428, 2437, 3254
BELT, R. F., 73-2295
BELYAEV, YU. D., 73-55
BENADA, J., 73-2797, 3914
BENCE, A. E., 73-1795, 2772, 3894
BENEDIKTOVA-LODOCHNIKOVA, N. V., 73-57
BENEŠ, K., 73-2029
BENNER, B. R., 73-2457
BENNETT, C. E. G., 73-2889
BENNETT, H., 73-2269
BENNETT, J. M., 73-2396
BENSCH, J. J., 73-3300
BENSTED, J., 73-2579
BENTOR, Y. K., 73-985
BENVIGNÜ, F., 73-4251
BEN-YAAKOV, S., 73-2731
BEN-YAIR, M., 73-2604
BERAN, A., 73-3456
BÉRCZ, I., 73-982
BERDESINSKI, W., 73-459
BERG, H. C., 73-843, 2996
BERGE, J. W., 73-1373, 3818
BERGENBACK, R. E., 73-3421, 4279
BERGER, A. R., 73-1206
BERGER, M. G., 73-2342
BERGER, W. H., 73-3106
BERGGREN, W. A., 73-1969
BERGQUIST, H. R., 73-4076
BERGQUIST, S. G., 73-4124
BERGSTOL, S., 73-3590
BERNARD, A. J., 73-2299
BERNARD, H. A., 73-2247
BERNARD, J. H., 73-259
BERNARDINI, G. P., 73-2905
BERNAS, R., 73-3922
BERNER, H., 73-2260
BERNER, R. A., 73-1872
BERNHARDT, H.-J., 73-3710
BERNIER, P., 73-974
BERNOTAT, W. H., 73-502
BERRY, H., 73-3921
BERRY, L. G., 73-2302, 3547
BERRYHILL, H. L., Jr., 73-543
BERTHOU, J., 73-1277
BERTIN, L., 73-1196
BERTOLETTI, M.-J., 73-3906
BERTRAM, R. E., 73-916
BERTRAND, J.-M., 73-1705
BERUBE, Y., 73-1189
BESKROVNNY, N. S., 73-520
BESSON, G., 73-1307
BESSON, H., 73-2599
BESSON, M., 73-1881, 1891
BESWICK, A. E., 73-3745
BETHKE, P. M., 73-1633
BETHUNE, P. DE, 72-1014
BEUGNIES, A., 73-4103
BEUTNER, E. L., 73-1467, 2462
BEVILACQUA, C., 73-1197
BEYER, R. L., 73-598
BEYTH, M., 73-3785
BEZRODNYKH, YU., P., 73-2474
BEZVODOVA, B., 73-1897
BEZZI, A., 73-4188
BHANDARI, N., 73-637
BHANDHARI, L. L., 73-1730
BHARGAVA, L. R., 73-938
BHASKARA RAO, A., 73-3806
BHAT, H. L., 73-333
BHAT, S., 73-637
BHATTACHARJ, S., 73-4166
BHATTACHARYA, C., 73-1048, 1055
BHATTACHARYA, D., 73-741
BHATTACHARYA, T. K., 73-490, 1991
BHATTY, M. I., 73-3519, 3520
BHAUMIK, P. K., 73-3388, 3389
BHUIYA, Z. H., 73-156
BIAIS, R., 73-1549
BIANCHI, B. P., 73-4332
BIBBY, D. M., 73-3353
BIBICOVA, E. V., 73-3274
BICK, K. F., 73-3012
BIEDERMAN, E. W., Jr., 73-2095
BIEHLER, S., 73-1404
BIEMANN, K., 73-1713
BIGGAR, G. M., 73-410, 443, 1809, 2607
BIGGERS, J. V., 73-4003
BIGGS, D. L., 73-2913
BILDGEN, P., 73-300
BILHAM, R. G., 73-3357
BILLARD, G., 73-3090
BILLARD, J., 73-1277
BILLINGS, G. K., 73-2506
BINDER, A. B., 73-1108
BINNS, R. A., 73-3073
BIRCH, F., 73-3217
BIRCK, J.-L., 73-1751
BIRD, W. H., 73-2182
BIRINA, YE. I., 73-2168
BIRKELAND, T., 73-1412, 2111
BISCHOFF, J. L., 73-187, 2595
BISHOP, A. C., 73-4172
BISHOP, D. G., 73-2103
BISHOP, W. W., 73-959
BISSE, R. E., 73-1170
BISCHOFF, A. A., 73-4149
BITTNER, H., 73-3456
BIZOUARD, H., 73-654
BJORKHOLM, P., 73-605
BJÖRKLUND, A., 73-561
BJÖRKSTEDT, K.-A., 73-2658
BJÖRLYKKE, A., 73-1412
BLACET, P. M., 73-3200
BLACK, L. P., 73-1131, 2213, 3926
BLACK, P. M., 73-1803, 2835, 3153, 3992
BLACKBURN, C. E., 73-2933
BLACKMON, P. D., 73-188
BLACKWELDER, B. W., 73-4298
BLADH, K. W., 73-2438
BLAGUL'KINA, V. A., 73-1908
BLAIN, C., 73-3781
BLAIS, R. A., 73-282
BLAKE, D. H., 73-1445
BLAKE, W., Jr., 73-3292
BLANCHARD, D. P., 73-3940
BLANCHARD, F. N., 73-1928
BLANCHET, P. H., 73-3322
BLANDER, M., 73-411, 3901
BLANK, H. R., Jr., 73-968
BLANKENBERG, J., 73-2578
BLASI, A., 73-3174, 4023
BLASSE, G., 73-3479
BLASZAK, M., 73-4242
BLATTNER, P., 73-540
BLAU, P. J., 73-3941
BLAXLAND, A. B., 73-692
BLAZY, P., 73-557
BLEEKER, P., 73-3415
BLOCKLEY, J. G., 73-2212
BLODGET, H., 73-605
BLOOMFIELD, K., 73-984
BLOOR, J. W., 73-178
BLOUNT, C. W., 73-3714
BLOXAM, T. W., 73-2673
BLU, G., 73-1194
BLUM, F., 73-3350
BLÜMEL, P., 73-4328
BOBERG, W. W., 73-1712
BOCCALETTI, M., 73-1983
BOCHKOV, B. G., 73-2418
BOCHKOV, S. V., 73-1321
BOCK, W., 73-2008
BOCQUIER, G., 73-2338
BODU, R., 73-3779
BOECKL, R., 73-1767
BOEKSCHOTEN, G. J., 73-958
BOESEN, R. S., 73-3074
BOETTCHER, A. L., 73-352
BOFFINGER, V. M., 73-909
BOGA, D. M., 73-2271
BOGARD, D. D., 73-3960, 397
BOGATSKIY, V. V., 73-1354
BOGDANOV, YU. A., 73-3187
BOGDANOV, Y. V., 73-2299
BOGOLEPOV, V. G., 73-2725
BOHLIN, L., 73-3659
BOHOR, B. F., 73-101
BOISSEN, R., 73-2308
BOLAND, J. N., 73-1810
BOLES, J. R., 73-1860, 4280
BOLLINBERG, H. J., 73-652
BOLLING, G. F., 73-1502, 151505
BOL'SHEDVOROVA, G. L., 73-1
BØLVIKEN, B., 73-2308
BONARDI, M., 73-226
BONATTI, E., 73-3785
BONDARENKO, A. T., 73-1069
BONEV, I., 73-326
BONHAM, H. F., 73-2683
BONNE, A., 73-3591
BONNEFOUS, J., 73-2089
BONNEMAYRE, A., 73-1549
BOOGAARD, M. VAN DEN, 73-8
BOOKS, K. G., 73-2166
BOORMAN, R. S., 73-1556
BOOTH, B., 73-3084
BORCHARDT, G. A., 73-176
BORCHERT, H., 73-491
BORCHERT, W., 73-3402
BORCSIK, M., 73-1523, 1742
BORGES, B., 73-3712
BORODAEV, YU. S., 73-775, 194

- BOROVEC, Z., 73-1224
 BORRESWARA RAO, C., 73-1627
 BOSAZZA, V. L., 73-1351
 BOSE, M. K., 73-1991, 3040, 4151, 4154
 BOSSI, G. E., 73-3414
 BOSTRÖM, K., 73-2578
 BOTBOL, J. M., 73-2308
 BOTELER, R. C., 73-3379
 BOTHA, J. C., 73-1369
 BÖTKUNOV, A. I., 73-735
 BOTT, M. H. P., 73-2021
 BOTTINGA, Y., 73-2563, 3258, 3885
 BOTTINO, M. L., 73-3918
 BOTTOM, V. E., 73-2154
 BOUCHARD, R. J., 73-1559
 BOUCHET, M., 73-3906
 BOUDIER, F., 73-825
 BOULET, R., 73-1251
 BOULOS, M. S., 73-472, 1732
 BOULTER, M. C., 73-2078
 BOURGUIGNON, P., 73-1238, 3435
 BOUROULLEC, J., 73-2087
 BOURREL, J., 73-3602
 BOURRELLY, I. N., 73-522
 BOUSKA, V., 73-642, 747, 2797
 BOUSSARROQUE, J.-L., 73-2622
 BOUTRON, C., 73-1725
 BOUVIER, J. L., 73-2270
 BOUZIQUES, H., 73-3779
 BOWDEN, P., 73-3678
 BOWES, D. R., 73-538, 926, 2195, 3278
 BOWIE, S. H. U., 73-1187, 1192, 2308
 BOWN, M. G., 73-3883
 BOYARSKAYA, R. V., 73-1882
 BOYARSKAYA, YU. S., 73-1565
 BOYD, R. F., 73-1862
 BOYD, R., 73-456, 1461
 BOYD, W. W., Jr., 73-514
 BOYLE, R. W., 73-1453, 1637, 2308, 2483, 3548, 3562, 3566
 BOYNTON, G. R., 73-3354
 BOZDAR, L. B., 73-1370
 BRACE, W. F., 73-2170
 BRADLEY, O. E., 73-3568
 BRADLEY, W. F., 73-105
 BRADSHAW, N., 73-657
 BRADSHAW, R., 73-2109
 BRADT, R. C., 73-4003
 BRAITHWAITE, C. J. R., 73-4264
 BRANDON, A., 73-4234
 BRANDT, M. P., 73-3350
 BRANDT, R. T., 73-3510
 BRANDWIJK, V., 73-3448
 BRATTON, R. J., 73-1536
 BRAUN, G., 73-3722
 BRAUN, H., 73-3477
 BRAY, E., 73-4035
 BRAY, R. E., 73-1462
 BREEN, A., 73-2308
 BREEZE, A., 73-219
 BREGER, I. A., 73-1768
 BRENCHELLEY, P. J., 73-2105
 BRETT, R., 73-1748, 2769, 2781, 3882, 3884
 BREY, M. E., 73-3846, 3849
 BRICHET, E., 73-1695
 BRICKER, O. P., 73-2615
 BRIDGE, P. J., 73-2303, 2304
 BRIDGWATER, D., 73-3157
 BRIGGS, C. L., 73-3950
 BRIGGS, R. P., 73-2067
 BRINDLEY, G. W., 73-131, 162, 165, 174, 183, 1305, 2377, 3744, 4020, 4021
 BRINDLEY, J. C., 73-1971, 3020, 3981, 4138, 4235
 BRINER, G. P., 73-3410
 BRINKMANN, D., 73-1312
 BRISSOT, J. J., 73-1574
 BRISTOL, C. C., 73-2253
 BRISTOL, N. A., 73-3241
 BRISTOW, C. R., 73-2081
 BRITTON, D., 73-1156
 BRODZINSKI, R. L., 73-2785
 BROECKER, W. S., 73-86
 BROGNOG, G., 73-1954
 BROMBERGER, S. H., 73-2254
 BRONDI, A., 73-2299, 4108, 4251
 BROOKES, C. A., 73-3212
 BROOKINS, D. G., 73-850, 1140, 2043, 3713
 BROOKS, C., 73-18, 4165
 BROOKS, E. R., 73-1142
 BROOKS, H. K., 73-1112
 BROOKS, J. D., 73-537
 BROOKS, J. P. V., 73-1213
 BROOKS, M., 73-4102, 4135
 BROOKS, R. A., 73-118
 BROOKS, R. R., 73-1193, 3868
 BROSGE, W. P., 73-285
 BROTH, C., 73-1277
 BROTHERS, R. N., 73-2035
 BROTHERTON, M. S., 73-2118
 BROUGH, C., 73-2542
 BROUGHTON, P. L., 73-455, 478, 1915, 2538
 BROUGHTON, W. A., 73-3581
 BROUSSE, R., 73-654, 3082
 BROUWER, G. C., 73-978
 BROWER, E., 73-2602
 BROWN, A. C., 73-757, 1455, 1459
 BROWN, D. W., 73-1715
 BROWN, G., 73-3371, 3467
 BROWN, G. C., 73-2030, 3678, 4095
 BROWN, G. E., 73-1300, 1301
 BROWN, G. F., 73-3035
 BROWN, G. M., 73-608, 2008, 2022, 2950, 3896
 BROWN, F. S., 73-1679
 BROWN, J. J., Jr., 73-1586
 BROWN, J. L., 73-3307
 BROWN, J. S., 73-1435
 BROWN, M., 73-1057
 BROWN, P. E., 73-913, 4130
 BROWN, R. L., 73-3009
 BROWN, R. N., 73-2845
 BROWN, R. W., 73-1748, 3952
 BROWN, W. E., 73-2440
 BROWN, W. K., 73-1104
 BROWN, W. L., 73-1308, 2388, 3749
 BROWN, W. R., 73-2184
 BROWNE, P. R. L., 73-1447, 1921, 2660
 BROWNLOW, A. H., 73-1667
 BRUCKERT, S., 73-534
 BRÜCKNER, W. D., 73-3077
 BRUECKNER, H. K., 73-823
 BRUNFELT, A. O., 73-509, 3916
 BRUNO, E., 73-3472
 BRUNS, F. R., Jr., 73-3267
 BRUNTON, G. D., 73-2387
 BRUTY, D., 73-1683, 2697
 BRUYEVICH, S. V., 73-2723
 BRYAN, W. B., 73-2015
 BRYANT, B., 73-1403
 BRYDON, J. E., 73-99, 109
 BRYNARD, H. J., 73-3300
 BRYNHILL, I., 73-652, 3273
 BRYZGANOV, I. A., 73-1936
 BUAB, J. N., 73-2099, 3690
 BUBENICEK, L. A., 73-1360
 BUCHAN, S., 73-3234
 BUCKLEY, D. E., 73-388
 BUCKLEY, G. R., 73-3989
 BUD'KO, I. A., 73-758
 BUERGER, M. J., 73-87, 88, 1276, 2417, 3301
 BUGEL'SKIY, YU. YU., 73-1720, 1721
 BUIE, F. B., 73-1853
 BUKIN, V. I., 73-808
 BUKOWSKA, M. W., 73-4377
 BUKOWSKI, C. Z., 73-4377
 BULJAN, S. T., 73-3210
 BULKIN, G. A., 73-3957
 BULLOCK, K. C., 73-2486, 3244
 BULLOCK, P., 73-193
 BULYKIN, L. D., 73-271
 BUNCH, T. E., 73-644, 2065, 2755, 2757, 3881, 3935
 BUNKER, C. M., 73-288
 BURBAGE, E. J., 73-2176
 BURBANK, W. S., 73-2489, 3858
 BURCH, C. R., 73-2674
 BURCHARD, W.-G., 73-753
 BURDO, R. A., 73-3928
 BURKART-BAUMANN, I., 73-2906, 4061
 BURKE, E. A. J., 73-770, 4060
 BURKHOLDER, F. R., 73-2203
 BURLEY, B. J., 73-3750, 3751, 3752
 BURLINGAME, A. L., 73-1752, 3816, 3945
 BURNETT, A. D., 73-1266
 BURNETT, D., 73-3925
 BURNHAM, C. W., 73-953, 1299, 2547
 BURNIE, S. W., 73-3769
 BURNS, K., 73-947
 BURNS, R. G., 73-646, 3319, 3483
 BURR, K. F., 73-1499
 BURRELL, D. C., 73-3335
 BURRI, C., 73-1147, 3302
 BURSILL, L. A., 73-96, 215, 3447
 BURT, D. M., 73-1019
 BURTET-FABRIS, B., 73-2495
 BURTON, J. D., 73-390
 BURWASH, R. A., 73-4196
 BUR'YANOVA, I. Z., 73-2981
 BUSCH, C. R., 73-2001
 BUSCHE, F. D., 73-2755
 BUSCH, W. L., 73-3570, 3571
 BUSECK, P. R., 73-2513
 BUSH, C. A., 73-288
 BUSSAC, J., 73-3780
 BUSSEN, I. V., 73-807, 4081
 BUSSON, G., 73-973, 974, 998
 BUTCHER, N. J. D., 73-4101
 BUTENUTH, W., 73-753
 BUTKIEWICZ, T., 73-4246
 BUTLER, C. P., 73-3955
 BUTLER, G. P., 73-3851
 BUTLER, J. C., 73-42
 BUTLER, J. R., 73-2044
 BUTLER, L. W., 73-3756
 BUTLER, P., Jr., 73-580, 3882
 BUTLER, S. R., 73-1559
 BUURMAN, P., 73-3255
 BUYAN, CH., 73-2499
 BYKOV, V. P., 73-1944
 BYKOVA, A. V., 73-808
 BYSTRÖM-BRUSEWITZ, A.-M., 73-2616
 CABALLERO, M. A., 73-1919
 CABALZAR, W., 73-2179
 CABANIS, B., 73-3168
 CABANNES, F., 73-2364
 CARRERA, N., 73-320
 CABRI, L. J., 73-736, 1568, 2899, 3555, 3704, 4063
 CABY, R., 73-2201
 CADAJ, W., 73-3991
 ČADEK, J., 73-474
 CADIGAN, R. A., 73-3824
 CADOGAN, P. H., 73-1753
 CAELLES, J. C., 73-1144
 CAHEN, L., 73-2205, 2206, 3288
 CAHOON, B. G., 73-1345
 CAILLÈRE, S., 73-752, 1797, 2599, 4048
 CAILLEUX, A., 73-3256
 CALAS, G., 73-802, 1869, 2936
 CALDER, J. A., 73-542, 2707
 CALDWELL, D. W., 73-2533
 CALLAWAY, P. C., 73-468
 CALLEGARI, E., 73-727
 CALVERT, S. E., 73-719
 CALVET, R., 73-122
 CALVO, C., 73-2432, 3481
 CAMEL, B., 73-4054, 4312
 CAMERON, B. E. B., 73-3004
 CAMERON, E. M., 73-578, 1682, 2308, 3862
 CAMERON, E. N., 73-881, 4039
 CAMERON, I. B., 73-298
 CAMERON, K. L., 73-2772
 CAMERON, W. E., 73-1798
 CAMPBELL, E. Y., 73-3791
 CAMPBELL, I., 73-3583
 CAMPBELL, I. C., 73-2631
 CAMPBELL, W. L., 73-2274
 CAMPOS, M., 73-2289
 CANILHO, M. H., 73-485
 CANN, J. R., 73-1969
 CANNILLO, E., 73-1291, 1296, 2369, 2415, 3466
 CANNON, H. L., 73-2753
 CANNON, W. F., 73-4125
 CAPEDEI, S., 73-3176
 CAPPONI, J.-J., 73-1553
 CARBONNEL, J.-P., 73-3281, 3290
 CARLES, D., 73-3452
 CARLIN, G. M., 73-2221
 CARLINO, P., 73-3990
 CARLSSON, G., 73-2286
 CARMICHAEL, I. S. E., 73-354, 3092, 3857, 4203
 CARMIO, S. M., 73-3693
 CAROZZI, A.-V., 73-2087, 4260
 CARPENTER, G. F., 73-2010
 CARPENTER, J. R., 73-4201
 CARPENTER, R. H., 73-563, 1399, 4050
 CARR, M. H., 73-2786
 CARR, R. M., 73-141, 425
 CARR, W. J., 73-1961
 CARRARA, A., 73-4123
 CARRARA, C., 73-2299
 CARR-BRION, K. G., 73-3349
 CARROLL, D., 73-137
 CARRON, J.-P., 73-688
 CARRON, M. K., 73-590, 600, 601, 1770
 CARSON, D. J. T., 73-28, 4197
 CARSTEA, D. D., 73-132
 CARTER, B., 73-920
 CARTER, J. L., 73-614, 2776
 CARTER, N. L., 73-2568
 CARVALHO, D. DE, 73-2468
 CARVER, R. E., 73-2243
 CARWILE, R. H., 73-2684
 CASANOVA, R., 73-2874
 CASE, D. R., 73-2793
 CASLAVSKY, J. L., 73-234
 CASTAING, P., 73-976
 CASTEN, U., 73-3233
 CATE, R. B., 73-1256
 CATTI, J. A., 73-193
 CATTI, M., 73-2442
 CAVENEY, R. J., 73-327
 CAWTHORN, R. G., 73-4170
 ČECH, F., 73-1804, 4249

- CERMIGNANI, C. 73-3156
 ČERNÁ, I., 73-2923, 2931, 4071
 ČERNÝ, P., 73-290, 656, 693, 2038, 2803, 2831, 2838, 2853, 2869, 2872, 2888, 2900, 2923, 2931, 3051, 3241, 4071
 CERVANTES, A., 73-204
 CERVILLE, B., 73-2908
 CESBRON, F., 73-2926, 3749
 CHADHA, M. S., 73-345
 CHAFFEE, M. A., 73-564
 CHAFFIN, H. S., Jr., 73-2696
 CHAIGNEAU, M., 73-957
 CHAIX, R. P., 73-3352
 CHAKRABORTY, K. L., 73-3604, 3605
 CHAKRAPANI NAIDU, M. G., 73-4043
 CHAKRAVARTI, S., 73-3039
 CHAMBERLIAN, V. D., 73-3956
 CHAMLEY, H., 73-203
 CHAMPNESS, P. E., 73-3880, 3999, 4004
 CHAN, S. I., 73-2784
 CHANDLER, J. C., 73-1768
 CHANDRA, K., 73-1730
 CHANDRASEKHARA GOWDA, M. J., 73-3151
 CHANG CHENG-FA, 73-4115
 CHANTRET, F., 73-1940
 CHAO, E. C. T., 73-1747
 CHAO, T. T., 73-552, 3703
 CHAPPELLE, J.-P., 73-3452
 CHAPMAN, A. H., 73-1091
 CHAPPELL, B. W., 73-3921
 CHAPPUE, G., 73-1494
 CHARLET, J. M., 73-4103
 CHAROY, B., 73-861
 CHARYGIN, A. M., 73-3179
 CHASE, C. G., 73-556
 CHATELIN, Y., 73-3516
 CHATTERJEE, A. C., 73-517
 CHATTERJEE, N., 73-1434
 CHATTERJEE, N. D., 73-412
 CHATTERJEE, P. K., 73-1875
 CHATTERJEE, S. K., 73-1297
 CHATTY, N. R., 73-3392
 CHATUPA, J., 73-3866
 CHAUDHARI, M. W., 73-4319
 CHAUDHRY, M. N., 73-4017
 CHAUDHURI, S., 73-1141
 CHAUMONT, C., 73-676, 2706
 CHAUSSIDON, J., 73-108, 420
 CHAUVEL, J.-J., 73-2847
 CHAUVET, J.-F., 73-1119
 CHAWDHRY, S. A., 73-3312
 CHAYES, F., 73-1660
 CHAYKA, V. M., 73-2705
 CHECHERSKAYA, L. F., 73-3478
 CHELISHCHEV, N. F., 73-2583
 CHEN, C.-H., 73-1858
 CHEN, J.-C., 73-832, 1707, 2031
 CHEN, P.-Y., 73-987, 1252
 CHENAVAS, J., 73-1553
 CHENEY, E. S., 73-3823
 CHENHALL, B. E., 73-1022
 CHERNAYA, L. I., 73-2499
 CHERNITSOVA, M. M., 73-1936
 CHERNITSOVA, N. M., 73-2938
 CHERNOV, V. M., 73-2973
 CHERNYAKHOVSKIY, A. B., 73-2815
 CHERNYAYEV, A. M., 73-1719
 CHERNYAYEVA, L. YE., 73-1719
 CHERNYSHEV, L. V., 73-1556
 CHESTER, R., 73-1683, 2088, 2697, 4263
 CHESTERMAN, C. W., 73-3298, 4372
 CHESWORTH, W., 73-312, 3380
 CHEVALIER, Y., 73-664
 CHEVALLIER, J.-M., 73-3256
 CHICHESTER, F. W., 73-126
 CHIHARA, K., 73-1814
 CHINGCHANG, B., 73-1960
 CHINNER, G. A., 73-3996, 4308
 CHIPP, E. R., 73-2748
 CHI-TRACH, H., 73-553
 CHLUPÁČOVÁ, M., 73-2028
 CHO, U. C., 73-3330
 CHONAN, N. A., 73-2339, 3638
 CHOU, C.-L., 73-3961
 CHOUDHARI, B. P., 73-2927
 CHOUDHURI, A., 73-1817
 CHOUDHURY, S. C. R., 73-894
 CHOW, T. J., 73-547, 1127
 CHOWDHARY, P. K., 73-926
 CHRIST, C. L., 73-1887, 2598
 CHRISTENSEN, R. W., 73-153
 CHRISTIAN, R. P., 73-590, 600, 601
 CHRISTIANSEN, P., 73-3945
 CHRISTIANSEN, R. L., 73-968
 CHRISTIANSSON, K., 73-2189
 CHRISTIE, D. M., 73-815
 CHRISTIE, O. H. J., 73-1656
 CHRISTOPHE MICHEL-LÉVY, M., 73-2775
 CHRISTOPHER, P. A., 73-2227, 2228
 CHROSTON, P. N., 73-3065, 4135
 CHRT, J., 73-1086
 CHUGUYEVSKAYA, O. M., 73-269
 CHUNG, C. F., 73-284
 CHUNG, D. H., 73-1067
 CHURCH, S. E., 73-2982
 CHURCHILL, W. M., 73-2542
 CHURCHMAN, G. J., 73-141, 425
 CID-DRESDNER, H., 73-2934
 CÍMBÁLNÍKOVÁ, A., 73-111, 112, 1223, 1832
 Cissé, J., 73-1502, 1503, 1505
 CLARINGBULL, G. F., 73-1197
 CLARK, A. H., 73-5, 763, 811, 812, 1144, 1912, 2901, 2902, 3328, 4037, 4084
 CLARK, A. L., 73-506, 1024
 CLARK, B. R., 73-2567
 CLARK, G. W., 73-325, 1579
 CLARK, J. R., 73-3460
 CLARK, K. F., 73-3574
 CLARK, R. H., 73-2060
 CLARK, R. S., Jr., 73-1768
 CLARK, S. P., Jr., 73-6, 3970
 CLARK, T., 73-3725
 CLARK, W. B., 73-3585
 CLARKE, B. D., 73-1969
 CLARKE, D. B., 73-410, 1809
 CLARKE, O. M., Jr., 73-3413
 CLAYTON, C. G., 73-1187
 CLAYTON, R. N., 73-185, 555, 2718, 2719, 2777, 3789, 3911
 CLEMENCY, C. V., 73-4053
 CLEMENTZ, D. M., 73-175
 CLENDENING, J. A., 73-1255
 CLERCX, B., 73-3592
 CLEVERLY, W. H., 73-641
 CLIFF, R. A., 73-3917
 CLIFFORD, P. M., 73-3194, 4216
 CLIFTON, H. E., 73-2255
 CLIFTON, J. R., 73-3715
 CLOCHIATTI, R., 73-721
 CLOOS, P., 73-3394
 CNUDE, J. P., 73-4327
 COATS, R. P., 73-3044
 COBB, W. D., 73-46
 COBBING, E. J., 73-949
 COBEAN, R. H., 73-572
 CODY, R. D., 73-2913
 COE, M. D., 73-572
 COE, R. S., 73-3735
 COELHO, A. V. T. P., 73-1989, 2135
 COERTZE, F. J., 73-883
 COGNÉ, J., 73-1119
 COHEN, A. J., 73-3961
 COHEN, C., 73-3452
 COHEN, L., 73-4068
 COIRO, V. M., 73-2352
 COLCHESTER, D. M., 73-3045
 COLE, J. W., 73-2057, 2058, 2059, 4214
 COLE, W. F., 73-2426, 3493
 COLEMAN, R. F., 73-2308
 COLEMAN, R. G., 73-1030, 3035
 COLLERSON, K. D., 73-1053, 3046
 COLLINS, B. I., 73-2728
 COLLINS, G. A. D., 73-219
 COLLINS, J. A., 73-2299
 COLLINS, J. J., 73-1469
 COLLINS, L. G., 73-1386, 1706
 COLLINS, R. S., 73-2516
 COLLINSON, C., 73-4281
 COLLISTER, J., 73-3927
 COLVILLE, A. A., 73-2403, 2407
 COMEL, C., 73-383
 COMPTON, W., 73-3876, 3921
 CONDIE, K. C., 73-3835
 CONDRADE, R. A., Sr., 73-161
 CONEL, J. E., 73-2778
 CONLEY, R. F., 73-170
 CONNAN, J., 73-548
 CONNOLLY, J. W. D., 73-1673
 CONNOR, B. P., 73-1971
 CONRAD, O. G., 73-3096
 CONSTANTINESCU, E., 73-718
 CONWAY, C. M., 73-1676
 COOK, A. C., 73-2082
 COOK, A. H., 73-1071, 3357
 COOK, D. K., 73-4370
 COOK, E. B. T., 73-1163
 COOK, H. E., 73-2983
 COOK, W. R., Jr., 73-96
 COOKE, S. R. B., 73-4210
 COOMBS, D. S., 73-2148
 COOPER, A., 73-1132
 COOPER, A. F., 73-2145
 COOPER, J. A., 73-2210
 COOPER, J. F., 73-1855, 4372
 COOPER, J. F., Jr., 73-4069, 4375
 COOPER, S. B. N., 73-449
 COOPER, W. F., 73-2416
 COORAY, P. G., 73-1047, 4259
 COPE, J. H., 73-3617, 3649
 COPELAND, R. A., 73-4275
 COPELOWITZ, I., 73-4041
 COPELEY, A. J., 73-1149
 COPPENS, P., 73-2416
 COPLEY, P. A., 73-1811
 CORADOSSI, N., 73-3788
 CORBA, J., 73-1155
 CORBETT, R. K., 73-2438
 CORIELL, S. R., 73-324, 1506
 CORMIER, R. F., 73-2224
 CORNWALL, H. R., 73-1465, 3297
 CORNWELL, J. D., 73-1953
 CORRAL, D. J. S. M., 73-422
 CORSINI, F., 73-2905
 CORSMIT, A. F., 73-3479
 COSGROVE, M. E., 73-515
 COSTIN, A. B., 73-3408
 COTTERRELL, K., 73-680
 COTTY, W. F., 73-2624
 COULOMB, J., 73-2305
 COUTY, R., 73-135
 COWARD, M. P., 73-2138, 2966, 3157
 COWPERTHWAIT, I. A., 73-1234
 COX, A., 73-3220
 COX, K. G., 73-874, 2036, 4194
 COX, R., 73-1446
 COX, R. E., 73-3837
 COY-YLL, R., 73-282, 2048
 CRADWICK, M. E., 73-229, 2375
 CRADWICK, P. D. G., 73-3468
 CRAIG, J. R., 73-180, 3671, 3707
 CRAMPON, N., 73-3147
 CRANDALL, P. B., 73-3209
 CRANE, R. L., 73-392
 CRAUS, M. L., 73-2406
 CRAWFORD, A. R., 73-1352, 1778
 CRAWFORD, K. E., 73-4304
 CRAWFORD, M. L., 73-1846, 2774
 CRAWFORD, W. A., 73-385
 CREASEY, S. C., 73-3297
 GREENLAND, L. P., 73-590
 CREMER, P. L., 73-1022
 CRESSWELL, D., 73-3166
 CRESSY, P. J., 73-1766, 1774
 CRESSY, P. J., Jr., 73-3971
 CRISTOFOLINI, R., 73-3084
 CRITTENDEN, M. D., 73-2236
 CROCKET, J. H., 73-3769
 CRONAN, D. S., 73-531, 2698
 CRONIN, J. R., 73-634
 CROSBY, P., 73-849
 CROSLAND, R. J., 73-2272
 CROSS, C. A., 73-1107
 CROUSE, R. A., 73-3051
 CROWELL, J. C., 73-997
 CROZAZ, G., 73-2779
 CRUICKSHANK, D. W. J., 73-219, 1278
 CRUZ, C. A., 73-1987
 CULBERT, R. R., 73-1666, 4196
 CULVER, J. R., 73-1257
 CUMMING, G. L., 73-1629
 CUNDARI, A., 73-14
 CUPPERS, N. P., 73-2534
 CURRAN, E. B., 73-4170
 CURRELL, B. R., 73-350
 CURRIE, K. L., 73-847, 848, 1998, 2033, 3079, 4306
 CURTIS, C. D., 73-41, 198, 1359, 1655, 3463
 CUTTITTA, F., 73-590, 600, 601, 1770
 CZAJOR, E., 73-4243
 CZAMANSKE, G. K., 73-1906, 3619, 4083
 CZANK, M., 73-3753
 DA COSTA, L. A. M., 73-866
 DADASHEV, F. G., 73-2735
 DAGELAISKAJA, I. N., 73-1056
 DAGLEY, P., 73-3228
 DAHL, O., 73-3159
 DAIGLE, E. E., 73-2247
 DAILY, B., 73-2214, 3044
 DALE, D. H., 73-3771
 DALE, I. M., 73-73
 DALL'AGLIO, M., 73-2308
 DAL NEGRO, A., 73-2415, 3466
 DAL PIAZ, G. V., 73-2495, 3175
 DAMBERGER, H. H., 73-2094
 DANCHIN, R. V., 73-596
 DANDURAND, J.-L., 73-2655, 3508
 DANGHORBANI, M., 73-3937
 D'ANGEJAN, B. F., 73-4301
 DANIELS, H., 73-3464
 DANIELS, J. L., 73-838, 839, 840
 DANNER, W. R., 73-3831, 4270
 DANTO, J., 73-2662
 DARLING, R., 73-64, 2895
 DAS, D., 73-3388, 3389
 DAS, H. A., 73-74, 75
 DASCH, E. J., 73-541
 DASGUPTA, D. R., 73-3498
 DASGUPTA, H. C., 73-1653
 DASHER, J., 73-1349
 DAS PODDAR, P. K., 73-1166

- DASS, A. S., 73-2308, 3562, 3566
 DATAR, D. S., 73-2927
 DATT, R. K., 73-366
 DAUGAS, J.-P., 73-3082
 DAVENPORT, P. H., 73-2308
 DAVIDSON, L. R., 73-4000
 DAVIDTZ, J. C., 73-127
 DAVIES, D., 73-2164
 DAVIES, G., 73-356
 DAVIES, I. M., 73-4232
 DAVIES, P. J., 73-3308
 DAVIS, C. E., 73-1222
 DAVIS, G. H., 73-3616
 DAVIS, G. R., 73-2308
 DAVIS, P. K., 73-3963
 DAVLETOV, I. K., 73-3793
 DAVY, R., 73-3863
 DAWOUD, A. S., 73-4110
 DAWSON, J. B., 73-1990, 3033
 DAY, D. P., 73-2245
 Day, H. W., 73-3197, 3737
 DE, P. K., 73-155
 DEAN, J. M., 73-3110
 DEB, S. K., 73-1434
 DE BETHUNE, P., 73-1014
 DE CARVALHO, D., 73-2468
 DE CONINCK, F., 73-3437
 DE DAPPER, M., 73-4109
 DEEGAN, C. E., 73-4231
 DEERE, D. U., 73-1264
 DE FIGUEIREDO GOMES, C., 73-4065
 DEGENS, E. T., 73-499
 DE GEOFFROY, J., 73-1384, 3512, 3860
 DE GRAAF, N., 73-74
 DE GRAMONT, X., 73-1549
 DE GROOT, K., 73-3689
 DEIKE, R. G., 73-1723
 DEJOU, J., 73-664, 676, 2706
 DE KANTER, J. J. P. M., 73-1317
 DE LAETER, J. R., 73-16, 577, 1128, 2212, 2283, 2788, 3876
 DELBOVE, F., 73-433
 DELEVAUX, M. H., 73-2740, 3620, 3775
 DEL GIÚDICE, D., 73-1405
 DELHAL, J., 73-2207, 2208, 3288
 DELIENS, M., 73-2942, 3987
 DELITSIN, I. S., 73-3748
 DELL, C. I., 73-1876
 DELLES, F. M., 73-3907
 DELOFFRE, R., 73-2087
 DE MICHELE, V., 73-89, 1197
 DEMOVIĆ, R., 73-1692
 DENAEYER, M.-E., 73-3800
 DENICE, M. R., 73-3888
 DENISON, R. E., 73-3299
 DENNEN, W. H., 73-2865
 DENNISON, J. M., 73-2244
 DENT GLASSER, L. S., 73-1318, 2399
 DEPCIUCH, T., 73-7, 8, 9, 10
 DEPREZ, G., 73-1277
 DE QUERVAIN, F., 73-3366, 3631
 DE RANGO, C., 73-2446
 DE RANTER, C. J., 73-3489
 DERBY, J. V., 73-3891
 DERCOURT, J., 73-2998
 DERÉN, J., 73-3701
 DERIE, R., 73-3695
 DE ROEVER, E. W. F., 73-2132
 DE ROEVER, W. P., 73-1042, 3169
 DESAI, P. J., 73-4055
 DESBOROUGH, G. A., 73-2005, 2946, 4083
 DESCHAMPS, N., 73-522
 DE SEGONZAC, G. D., 73-2102
 DE SOUZA SANTOS, P., 73-183
 DESSAU, G., 73-1718
 DE ST. JORRE, M. G. F., 73-3511
 DE SWARDT, A. M. J., 73-931
 DEUTSCH, E. R., 73-3227
 DEUTSCH, S., 73-3288
 DEVANARAYANAN, S., 73-2378
 DEVARAJU, T. C., 73-1035
 DEVENDRANATH, T., 73-891, 4156
 DE VILLIERS, J. S., 73-882
 DEVNOSASCHVILI, D., 73-3286
 DE VRIES, C. D. S., 73-3189
 DEVRIES, R. C., 73-361, 1082
 DE WAAL, S. A., 73-1905, 4041
 DE WAARD, D., 73-2149
 DEWEY, J. F., 73-1947
 DEWIS, F. J., 73-2733
 DE WYS, E. C., 73-308
 DEY, A. K., 73-3645
 DIAMOND, H., 73-3919
 DIAMOND, S., 73-152, 178
 DICKENS, B., 73-2440
 DICKINSON, K. A., 73-4286
 DICKSON, F. W., 73-3714
 DICKSON, J. A. D., 73-2277
 DI COLBERTALDO, D., 73-1879, 4093
 DIETRICH, H., 73-2349
 DIETRICH, V., 73-1801
 DI GIROLAMO, P., 73-4207
 DIKSHIT, O. M., 73-2458
 DILLON, W. P., 73-3202
 DIN, V. K., 73-4172
 DINGLE, R. V., 73-873
 DIONNE, G. F., 73-2366
 DI PIERRO, M., 73-4015
 DIRKS, R. A., 73-2001
 DISCENDENTI, A., 73-4250
 DISTLER, G. I., 73-1499, 1504
 DIXON, J. E., 73-4308
 DIXON, P. D., 73-3996
 DMITRENKO, N. K., 73-689
 DMITRIK, A. L., 73-1943
 DMITRIYEVA, M. T., 73-765
 DOAN, A. S., 73-3889
 DOBELL, J. P., 73-2245
 DOBRETsov, N. L., 73-1038, 2311
 DOBRIDIN, V., 73-3286
 DODD, J. R., 73-2918
 DODGE, F. C. W., 73-1668, 2669, 2836, 2842
 DODONOVA, T. A., 73-3030
 DODSON, M. H., 73-3268
 DOE, B. R., 73-3620, 3775, 3897, 4289
 DOELLING, H. H., 73-2485, 2527
 DOERING, K., 73-3340
 DOHNANYI, J. S., 73-618
 DOIGN, R., 73-2675
 DOLCATER, D. L., 73-145, 2315
 DOLGOV, Yu. A., 73-318, 1773, 2861, 3181
 DOLOMANOVA, Ye. I., 73-2864
 DOMBROVSKAYA, Zh. V., 73-2844
 DOMEL, G., 73-69, 575, 3348
 DONAHUE, J., 73-2173, 4277
 DONALDSON, J. A., 73-3223
 DONDERER, E., 73-51
 DONNELLY, T. H., 73-3771
 DONNAY, J. D. H., 73-210, 3503, 3504
 DONNELL, J. R., 73-2005
 DONNELLY, T. H., 73-3332
 DONNELLY, T. W., 73-2008
 DONNOT, M., 73-3629
 DOORNKAMP, J. C., 73-1957
 DÖPEL, E., 73-1956
 DORNBERGER-SCHIFF, K., 73-1282, 1285
 DOROGOVIN, B. A., 73-1429
 DORR, J. V. N., II, 73-3510
 DORT, W., Jr., 73-778, 781
 DÖSSEGER, R., 73-978
 DOUGLAS, J. A. V., 73-639, 3888
 DOUGLAS, L. A., 73-100
 DOUGLAS, R. J. W., 73-1962
 DOVETON, J. D. H., 73-1737
 DOWNES, M. J., 73-3084
 DOWNIE, C., 73-1198, 2196
 DOWTY, E., 73-2757, 2769, 2833, 3460, 3935
 DOYEN, L., 73-2299
 DOZONO, M., 73-421
 DRAKE, J. J., 73-3833
 DRAKE, M. J., 73-3762, 3947
 DREIMANIS, A., 73-2334
 DRESCHOFF, G., 73-3723
 DREVER, J. I., 73-201, 2994
 DREVER, H. I., 73-583
 DREWES, H., 73-4126
 DRICKAMER, H. G., 73-3319
 DRITS, V. A., 73-1943, 2381, 3382
 DROSTE, J. B., 73-3416
 DRUMMOND, A. D., 73-3683
 DRURY, S. A., 73-3163, 4324
 DUBE, A., 73-3976
 DUBEY, B. L., 73-371
 DUBINCHUK, V. T., 73-2930
 DUBOIS, M., 73-3331
 DUBOV, R. I., 73-2308
 DUCHESNE, J. C., 73-673, 3799, 4044
 DUDEK, A., 73-1050, 2129
 DUEDELL, I. W., 73-384, 388
 DUFFEY, D., 73-1186
 DUGGAN, M. B., 73-3073, 4202
 DUGGAN, N. T., 73-4159
 DUKE, V. W. A., 73-3633
 DULHUNTY, J. A., 73-13
 DUNCAN, A. R., 73-598, 2061
 DUNCAN, D. W., 73-3683
 DUNCAN, J. F., 73-429
 DUNCAN, J. R., 73-1253
 DUNDON, R. W., 73-409
 DUNHAM, A. C., 73-857, 1811, 3314, 3880
 DUNHAM, K. C., 73-560
 DUNITZ, J. D., 73-3449
 DUNLOP, A. C., 73-3527
 DUNNING, F. W., 73-1116
 DUNNING, G., 73-4372
 DUNNING, G. E., 73-1855, 4069, 4375
 DUNNING, W. J., 73-338
 DUNSMORE, H., 73-776
 DUPLAIX, S., 73-3281
 DUPONT, B., 73-2299
 DUPONT, G., 73-3749
 DUPONT, P., 73-1567
 DUPUY, C., 73-1675, 1705
 DURAND, B., 73-159
 DURHAM, C. C., 73-554, 2308, 3862
 DURNAY, D. W., 73-2069
 ĐUROVIĆ, S., 73-2425
 DUTCHER, R. R., 73-1012
 DUTHIE, D. M. L., 73-1214
 DVORNIKOV, A. G., 73-1873
 DWORNIK, E. J., 73-590, 600, 601
 DYCK, W., 73-486, 3861
 DYDA, M., 73-3982
 DYKES, E., 73-794
 DYNI, J. R., 73-2341
 DYUFUR, M. F., 73-2140
 DZIEWONSKI, A. M., 73-1072
 DZIUBA, E. Z., 73-1531, 1532
 DZWINEL, J., 73-2174
 EADE, K. E., 73-470
 EAKINS, G. R., 73-2743
 EALES, H. V., 73-3220
 EARGLE, D. H., 73-2299
 EARL, J. L., 73-547
 EARLI, F. N., 73-1401
 EARLY, K. R., 73-1270
 EASTIN, R., 72-24, 2215, 2216
 EATON, G. P., 73-1702
 EBERLEIN, G. D., 73-1382
 ECHEVIN, M., 73-1725
 EDELMAN, R., 73-2959
 EDEN, R. A., 73-1045
 EDENHARTER, A., 73-772, 1332
 EDGAR, A. D., 73-2933, 3734
 EDWARDS, B., 73-3371
 EDWARDS, J., Jr., 73-3572
 EDWARDS, L. N., 73-997
 EFIMOVA, E. S., 73-3068
 EGLINGTON, G., 73-3837
 EGLINTON, G., 73-1753
 EGOROV-TISENKO, Yu. K., 73-237
 EGOYAN, V. L., 73-2974
 EHLERS, E. G., 73-392, 1199
 EHLMANN, A. J., 73-3420
 EHMANN, W. D., 73-587, 1385, 1764, 3937
 EISBACHER, G. H., 73-3005
 EISENTRAUT, K. J., 73-3923
 EKSLUND, W. A., 73-2983
 ELSTRÖM, T., 73-2260
 EKSTRÖM, T. K., 73-2600, 3760
 EL BOUSHI, I. M., 73-3600
 ELDER, J. W., 73-4090
 ELDERFIELD, H., 73-1683, 1926, 2088, 2580, 2712
 ELDERS, W. A., 73-1404
 ELDRIDGE, J. S., 73-3930
 ELEVATORSKI, E. A., 73-3657
 EL FETOUH, M. A., 73-4253
 ELGER, G. W., 73-1542
 EL-HINNAWI, E. E., 73-1164, 1916, 2915, 3786
 ELISEEVA, G. G., 73-3287
 EL-KADI, M. B., 73-192
 ELLER, E., 73-605
 ELLER, J.-P., VON, 73-1014
 ELLINGSON, J. A., 73-3011
 ELLIOT, D. H., 73-911
 ELLIOTT, J. C., 73-794, 795, 796, 3721
 ELLIOTT, R. B., 73-2721
 ELLIS, A. J., 73-2660
 ELLIS, R. M., 73-3232
 EL-RAFEI, E. A., 73-1476
 ELSDON, R., 73-738
 EL-SHAOURY, H. M., 73-2511
 EL SHAZLY, E. M., 73-3596, 4032, 4190
 ELTANTAWY, I. M., 73-1233
 EL-TARABILI, E., 73-1478
 ELWELL, J. H., 73-1693
 ELZIE, J. L., 73-597
 EMBEY-ISZTIN, A., 73-3022
 EMBREY, P. G., 73-1932
 EMELEUS, C. H., 73-3896
 EMILIANI, C., 73-1624
 EMILIANI, F., 73-2806
 EMMERMAN, R., 73-66
 EMSLIE, R. F., 73-2676
 ENAY, R., 73-974
 ENDO, Y., 73-1500, 1560, 1577
 ENGEL, A. E. J., 73-2984
 ENGEL, C. G., 73-2984
 ENGEL, G., 73-1337
 ENGEL, P., 73-1332
 ENGELHARDT, W. v., 73-1775
 ENGELS, G. G., 73-1480
 ENGELS, J. C., 73-3271
 ENGLUND, J.-O., 73-4322
 EPPLER, W. F., 73-452
 EPSTEIN, S., 73-3909, 3954
 ERD, R. C., 73-4077, 4376

- ERDOSH, G., 73-3540
 EREMEEV, A. N., 73-2308
 ERICKSON, M. P., 73-3013
 ERICSSON, B., 73-2692
 ERLANK, A. J., 73-596
 ERLICH, E. N., 73-2047
 ERMANOVICS, I. F., 73-3006
 ERTEM, G., 73-131, 139
 ESCHER, A., 73-3157
 ESPENSHADE, G. H., 73-3010
 ESPINOSA, G. P., 73-1541, 3209
 ESPOS, L. F., 73-1177
 ESQUEVIN, J., 73-2231
 ESSINGTON, M., 73-3782
 ESSON, J., 73-857
 ESTRADE-SZWARCKOPF, H., 73-3452
 ESWARAN, H., 73-1220, 3437
 ETHERIDGE, M. A., 73-1053, 2565
 EUGSTER, H. P., 73-304
 EUGSTER, O., 73-3922
 EULITZ, W. R., 73-450
 EVAMY, B. D., 73-4226
 EVANS, A., 73-3228
 EVANS, A. L., 73-3279
 EVANS, B. W., 73-1522
 EVANS, D. S., 73-1169
 EVANS, H. T., Jr., 73-4079, 4080
 EVANS, I. O., 73-1200
 EVANS, J. R., 73-3655, 4374
 EVANS, L. L., 73-1395
 EVANS, M. E., 73-3226
 EVANS, R., 73-1070
 EVANS, R. K., 73-2490
 EVANS, T., 73-356
 EVENSON, N. M., 73-609
 EVERTS, P., 73-3291
 EVRDARD, P., 73-2299
 EVSTIGNEVA, T. L., 73-4082
 EWART, A., 73-2063
 EWERS, W. E., 73-1358
 EYRISH, M. V., 73-755
- FABBI, B. P., 73-1176, 1177, 2285, 3782
 FABBRI, A., 73-845
 FABBRI, A. G., 73-284
 FABRICAND, B. P., 73-3846, 3849
 FABRÉS, J., 73-678, 3168
 FACCHINELLI, A., 73-3472
 FACER, R. A., 73-2882
 FAGAN, J. M., 73-563, 1399
 FAHEY, J. J., 73-667, 4076
 FAHRIG, W. F., 73-470, 3001, 4355, 4356
 FAIRBAIRN, P. E., 73-2867
 FAIRHEAD, J. D., 73-1122, 2204
 FAJNOR, V., 73-1606
 FALKE, H., 73-978
 FALLA, W. S., 73-3421
 FANFANI, L., 73-3495
 FANG, J. H., 73-1293, 1327, 1328
 FARABAUGH, E. N., 73-34
 FARAG, I. A. M., 73-3596
 FARAMAZYAN, A. S., 73-3783
 FARESTVEIT, A., 73-4350
 FARGE, Y., 73-3452
 FARINHA RAMOS, J. M., 73-1985
 FARIS, M. L., 73-3598
 FARKAS-JAHNKE, M., 73-1282, 1285, 3450, 3451
 FARMER, D. G., 73-913
 FARMER, V. C., 73-2373, 3468
 FARN, A. E., 73-2642
 FARQUHARSON, R. B., 73-1130, 4198
 FARRAN, J., 73-1517
 FARRAR, E., 73-1144, 2229, 2230
 FARRINGTON, J. W., 73-3836
- FARUQI, F. A., 73-2339, 3398, 3399, 3403, 3441, 3638, 3643
 FASFOUS, B. R. B., 73-3599
 FÁTOR, I., 73-437
 FAUCK, R., 73-2337
 FAURE, G., 73-24, 25, 524, 1137, 1141, 2215, 2216, 2684
 FAUST, J. W., Jr., 73-334
 FAVOROV, V. A., 73-1064
 FAVORSKAYA, M. A., 73-1125
 FAYE, G. H., 73-2348
 FAZAL, M., 73-3603
 FAZAL-UR-REHMAN, M., 73-3341
 FAZLIL ABBAS, S. A., 73-3640
 FEDIUK, F., 73-1049, 1807
 FEDIUKOVÁ, E., 73-1049, 1792
 FEDORCHENKO, V. I., 73-1836
 FEDOROV, N. F., 73-407
 FEDOSEEV, A. D., 73-1600
 FEDOTOV, A. F., 73-2376, 2383
 FEIGE, R., 73-405
 FELBER, H., 73-1145
 FELIX, C., 73-2122
 FENDER, B. E. F., 73-2412
 FERENCIC, A., 73-1405
 FERGUSON, C. C., 73-2968
 FERGUSON, J., 73-451, 712, 877, 1998, 2033, 2656, 4306
 FERGUSON, R. B., 73-2831, 2838, 2855, 2888, 2931, 4071
 FERLA, P., 73-4333
 FERRARI, J. M., 73-1172
 FERRARIS, G., 73-1313, 2356, 2439, 2441, 2442, 3505
 FERRELL, R. E., Jr., 73-118, 3691
 FERRETTI, O., 73-4108, 4251
 FERRIER, A., 73-1496
 FERRIER, M., 73-1550
 FERSHTATER, G. B., 73-1840
 FESELFELDT, K., 73-890
 FEYS, R., 73-978
 FIALA, F., 73-1026, 1981
 FIELD, C., 73-496
 FIELDER, G., 73-3872
 FIELDING, P. E., 73-451
 FIELDS, P. R., 73-3919
 FIESSINGER, F., 73-100
 FILBY, R. H., 73-76
 FILIMONOVA, A. A., 73-4082
 FILIPENKO, O. S., 73-1294
 FILIPPAKIS, S. E., 73-4010
 FILIPPOVA, YU. I., 73-3025
 FINCH, C. B., 73-1579, 2577
 FINCH, J., 73-1162
 FINKELMAN, R. B., 73-2184, 2465
 FINKELSTEIN, N. P., 73-2556
 FINNEY, J. J., 73-2946
 FIRMAN, R. J., 73-1952
 FISCHER, R., 73-329, 2408
 FISH, B. G., 73-1474
 FISH, S. F., 73-559
 FISHER, D. E., 73-3785
 FISHER, F. S., 73-2512
 FISHER, I. S., 73-4285
 FISHER, N. H., 73-1442
 FISKE, R. S., 73-961
 FITCH, F. J., 73-1234, 3279
 FITTON, J. G., 73-860
 FITZSIMONS, F. J., 73-1178
 FLEET, M. E., 73-3484, 3488
 FLEHMIG, W., 73-3321
 FLEISCHER, M., 73-1933
 FLEISCHER, P., 73-704
 FLEISCHER, R., 73-2811
 FLEISCHER, R. L., 73-2298
 FLEMING, C. A., 73-853
 FLETCHER, K., 73-3866
 FLINNSTEIN, J., 73-323
 FLINN, D., 73-3162
 FLORES, J. J., 73-345
- FLÖRKE, O. W., 73-438
 FLOWER, M. F. J., 73-3089
 FLOYD, P. A., 73-2024, 2970, 3167, 4184
 FODOR, R. V., 73-2065, 2833, 4171
 FOGEL'MAN, N. A., 73-267
 FOIT, F. F., Jr., 73-2395
 FOLGER, D. W., 73-3133
 FOLINSBEE, R. E., 73-1629, 1651
 FOLSOME, C. E., 73-3973
 FONTAINE, D., 73-3243
 FONTANA, M. P., 73-3452
 FOOKES, P. G., 73-1266
 FORBES, B. G., 73-3044
 FORBES, W. C., 73-1605
 FORD, A. B., 73-514, 3057, 3059
 FORD, D. C., 73-3833
 FORD, R. J., 73-3613
 FORD, R. D., 73-1111, 1473, 2080, 4101
 FORGHANI, A.-H., 73-3635
 FORNAREV, V. I., 73-423
 FOROVA, V. S., 73-1126
 FÖRSTER, H., 73-890
 FÖRSTNER, U., 73-3812
 FORSYTHE, D. L., 73-3615
 FORTUNÉ, J.-P., 73-2494, 2655, 3508
 FOSCOLOS, A. E., 73-47, 62
 FOSTER, R. H., 73-155
 FOSTER, R. L., 73-1463, 1646
 FOSTER, W. R., 73-1592
 FOURNIER, R. O., 73-3855
 FOWLER, G. A., 73-2092
 FOWLER, P. H., 73-469
 FOX, P. E., 73-914
 FOX, P. J., 73-2011
 FRAKES, L. A., 73-997
 FRÁNA, J., 73-3914
 FRANCHINI-ANGELA, M., 73-2356, 2439, 3505
 FRANCIS, P. W., 73-3, 3164
 FRANÇOIS, A., 73-2205
 FRANKART, R. P., 73-3433
 FRANKE, W., 73-367
 FRANK-KAMENETZKY, V. A., 73-1608
 FRANKLIN, A. G., 73-3386
 FRANKLIN, J., 73-3095
 FRANSOLET, A.-M., 73-3438
 FRANZ, E.-D., 73-377
 FRANZEN, N., 73-1781
 FRANZINI, M., 73-2284, 3465
 FRÄNZLE, O., 73-753
 FRASER, A. R., 73-140, 1225
 FRASER, G. S., 73-3651
 FRASER, W. L., 73-2448
 FREDERIKS, W. J., 73-335
 FREDLUND, D., 73-3617
 FREDRIKSSON, K., 73-3976
 FREEDMAN, J., 73-568
 FREEMAN, T., 73-544, 2096
 FREETH, S. J., 73-11, 3034
 FREGERSLEV, S., 73-2292
 FRÉJAQUES, C., 73-3780
 FRENCH, B. M., 73-667, 1774, 3889, 4192
 FRENCH, W. J., 73-2268
 FRENZEL, G., 73-677
 FRESHNEY, E. C., 73-2969
 FREUDENTHAL, M., 73-82
 FREW, N. M., 73-3923
 FREY, M., 73-3173, 4365
 FRIBERG, S., 73-2318
 FRICK, C., 73-2956
 FRIDMAN, A. I., 73-2308
 FRIEDEL, R. A., 73-2703
 FRIEDMAN, G. M., 73-2714, 3143, 3828, 3849
- FRIEDMAN, I., 73-30, 2699, 3910, 4217
 FRIEDRICH, G. H., 73-2308
 FRIEDRICH, O. M., 73-252
 FRIEDRICHSEN, H., 73-3843
 FRIEND, J. P., 73-110
 FRIGSTAD, O. F., 73-1893
 FRIPAT, J. J., 73-159, 3763
 FRISCH, T., 73-2799
 FRISHMAN, S. A., 73-1686
 FRISILLO, A. L., 73-2404, 3210, 3215
 FRISON, G., 73-4250
 FRITZ, J. C., 73-2753
 FRITZ, P., 73-2665, 3076
 FROESE, E., 73-1492, 2608
 FROLOV, A. A., 73-833
 FRODEL, C., 73-2306
 FROST, I. C., 73-3811
 FROST, R. R., 73-3652
 FRY, N., 73-3172
 FRYE, J. C., 73-3434, 3820
 FRYER, B. J., 73-2232
 FRYER, R. J., 73-3872
 FUJII, H., 73-346
 FUJII, N., 73-1831
 FUJINUKI, T., 73-529, 1831
 FUJIWARA, S., 73-240, 529, 530
 FULLAGAR, P. D., 73-3918
 FULLER, A. O., 73-4033
 FULLER, M., 73-1756
 FULLMER, L. D., 73-3209
 FULWEILER, R. E., 73-1396
 FUNG, P. C., 73-2694
 FURBISH, W. J., 73-4380
 FURMAN, S. C., 73-2298
 FÜSTER, J.-M., 73-957
 FUTRELL, D. S., 73-2796
 FYFE, W. S., 73-925, 2597, 3157, 4095
 FYLES, J. T., 73-3568
 FYSON, W. K., 73-4123
- GABE, E. J., 73-3455, 3485
 GABLE, D. J., 73-2104
 GAD, G. M., 73-1572, 3634
 GADOMSKI, M., 73-660
 GAERTNER, H. R., von, 73-90
 GAI, P. L., 73-3452
 GAIDARJEV, S., 73-3303
 GAIK, H. S., 73-1137
 GAIT, R. I., 73-2899
 GAL, M., 73-40, 102
 GALLAGHER, K. J., 73-3477
 GALLAGHER, M. J., 73-2308
 GALLI, E., 73-728, 2822, 4034
 GALLO, S., 73-3240
 GALLOWAY, M. C., 73-996
 GALOPIN DE CARVALHO, A. M., 73-2326
 GALWEY, A. K., 73-1510, 4012
 GAMAGE, C. F., 73-2287
 GAMALEYA, YU. N., 73-1839
 GAMBLE, J. A., 73-4183
 GAMBLE, J. C., 73-1264
 GAMYANIN, G. A., 73-773
 GANAPATHY, R., 73-595, 613, 2763, 3905, 3949, 3964, 3966
 GANCARZ, A. J., 73-3939
 GANGADHARAM, E. V., 73-837, 3928
 GANGOPADHYAY, P. K., 73-1434
 GANGULI, D., 73-408
 GANGULI, D. K., 73-2155
 GANGULY, J., 73-406
 GANGULY, T. K., 73-1166
 GANNIBAL, L. F., 73-807
 GANSSER, A., 73-3015
 GARBUCCI, P. L., 73-1142
 GARCÍA-ROSSELL, L., 73-1241

- RD, L. M., Jr., 73-1961
 RDNER, G., 73-1002
 RDNER, L. R., 73-2729
 RDNER, P. M., 73-2929
 RIN, J., 73-3490
 RLICK, G. D., 73-519
 RLICK, G. F. J., 73-1754, 2783
 RLICKI, A., 73-295
 RNER, R. W., 73-330
 RRELS, R. M., 73-1357, 2722
 RRETT, R. G., 73-1738, 2308
 RSKE, D. H., 73-3569
 RVIN, P. L., 73-3706
 SEPRIN, M., 73-2887
 SOYAN, M. S., 73-2864
 SPAR, O., 73-2791
 SPARRINI, E., 73-4045
 SPARRINI, E. L., 73-281
 SPERIN, M., 73-2392
 SS, I. G., 73-4087, 4194
 ST, P. W., 73-591
 ST, R. G., 73-121, 3700
 STNER, M., 73-3317
 TINEAU, L., 73-684, 3387, 3452
 ULTIER, J.-P., 73-3206
 UTHIER, F., 73-3084
 VASCI, A. T., 73-2045
 VRILOV, V. K., 73-3122
 VRILOVA, N. D., 73-2418
 WLAK, M., 73-1729
 Y, P., 73-3883
 YEV, I. A., 73-3027
 ZARA, C. P., 73-234
 ZBBIE, H. A., 73-83
 ZERT, E., 73-2411
 ZHARDT, M., 73-91
 ZBOUSKÝ, J., 73-1930
 ZES, R., 73-435
 ZFROY, J., 73-1940
 ZER, B. H., 73-4058
 ZIER, P., 73-2467
 ZSSLER, E., 73-1607
 ZLB, T., 73-1612, 2618
 ZLDSETZER, H., 73-2299
 ZLINAS, L., 73-3079
 ZLATLY, D. C., 73-15
 ZLER, S., 73-2403, 2407, 3209
 Z'MAN, M. L., 73-2981
 ZNINASCA, R., 73-2281
 ZNKIN, A. D., 73-1943, 4082
 ZNTILE, R. J., 73-3409
 ZNTLE, R. I., 73-873
 ZPTNER, A. R., 73-2168
 ZRARD, J., 73-605
 ZRARD, J. T., 73-3928
 ZRASIMOVA, YE. T., 73-1689
 ZRDEMAN, D. A., 73-3358
 ZRDEMANN, P. E., 73-3579
 ZRLING, E. K., 73-3275, 3277
 ZRMANN, K., 73-2299
 ZRMERAAD, J. H., 73-82
 ZRTHOFFEROVÁ, H., 73-3372
 ZRVAIS, F., 73-2364
 ZVERS, T. W., 73-997
 ZYSSANT, J., 73-2837
 ZEITH, M. A., 73-1020
 ZELIS, M., 73-2392
 ZENT, E. D., 73-1138, 2817, 189
 ZGEORGHITESCU, D., 73-706
 ZEZ, R., 73-320
 ZITTONI, A. G. L., 73-728
 ZOSAL, D. N., 73-2321
 ZOSE, N. C., 73-834
 ZOSE, S., 73-220, 224, 1312, 371, 2394, 3457, 3932
 ZOSH, A. J., 73-3770
 ZOSH, A. K., 73-3543
 ZOSH, D. B., 73-1438
 ZOSH, K. P., 73-942
 ZGHOSH, S., 73-517, 2479
 ZGIACOVAZZO, C., 73-2422
 ZGIARDINI, A. A., 73-1368, 1864, 3541
 ZGIBB, F. G. F., 73-583, 3879, 3880, 4001
 ZGIBBON, C. F., 73-319
 ZGIBBS, G. V., 73-231, 2354, 2359, 2360, 2361, 2362, 2398, 3462
 ZGIBBS, R. J., 73-1711, 3313
 ZGIBERT, H., 73-1549
 ZGIBERT, J. M., 73-1726
 ZGIBSON, E. K., Jr., 73-2761, 3907, 3960
 ZGIBSON, I. L., 73-503
 ZGIBSON, T. G., 73-1004
 ZGIERASCH, P., 73-1106
 ZGIESE, R. F., 73-2416
 ZGIGGENBACH, W., 73-1716
 ZGIGLIO, E., 73-2352
 ZGIGUERE, J. F., 73-2826
 ZGILBERT, F., 73-1072
 ZGILBERT, M. C., 73-1596, 1599
 ZGILES, H. N., 73-3880
 ZGILES, R. T., 73-3144
 ZGILKES, R. J., 73-418, 3738
 ZGILKESON, R. A., 73-3095
 ZGILL, J. E., 73-3704
 ZGILL, K. R., 73-1997
 ZGILLIESON, A. H., 73-2282
 ZGILLIGAN, L. B., 73-1654
 ZGILLOT, P.-Y., 73-4
 ZGILLUM, D. E., 73-3937
 ZGILMAN, R. A., 73-4276, 4342
 ZGILMER, G. H., 73-320
 ZGILMOUR, P., 73-2461
 ZGING, T. G., 73-2528
 ZGINGERICH, K. A., 73-1499
 ZGINSBURG, R. N., 73-2247
 ZGIOBI MANCINI, E., 73-4332
 ZGIPSON, M., Jr., 73-2256, 2331
 ZGIRESSE, P., 73-202
 ZGIRET, A., 73-720
 ZGIRGIS, B. S., 73-2581
 ZGIROD, M., 73-1979
 ZGITINS, J., 73-3296
 ZGIUTRONICH, J. E., 73-1065
 ZGLADKOV, V. G., 73-2971
 ZGLASBY, G. P., 73-1498, 1697
 ZGLASER, J. D., 73-3137
 ZGLASS, B. P., 73-3942
 ZGLASS, H. D., 73-3434
 ZGLASSER, F. P., 73-96, 363, 1581
 ZGLASSER, L., 73-3446
 ZGLASSER, L. S. DENT, 73-1318, 2399
 ZGLASSON, K. R., 73-1446
 ZGLAUSER, A., 73-1848
 ZGLAZER, A. M., 73-2410
 ZGLAZUNOV, O. M., 73-2682
 ZGLEASON, J. D., 73-3910
 ZGLEBOV, M. P., 73-3149
 ZGLEESON, C. F., 73-2483
 ZGLIKSON, A. Y., 73-945, 946, 988
 ZGLOVER, E. D., 73-4039
 ZGLOVER, L., 73-2067
 ZGLUSKOTER, H. J., 73-3424
 ZGODFREY, J. D., 73-2226
 ZGODOVIKOV, A. A., 73-1563, 1890, 2591
 ZGODOY, E., 73-852
 ZGODWIN, C. I., 73-3322
 ZGOEMAN, U. E. H., 73-1830
 ZGOETHALS, H., 73-2592, 2942
 ZGOETZE, C., 73-2170
 ZGOIKO, E. A., 73-807, 4081
 ZGOILO, E. A., 73-1608
 ZGOLD, D. P., 73-2003
 ZGOLDBERG, M., 73-4255
 ZGOLDBERY, R., 73-1920
 ZGOLDICH, S. S., 73-602
 ZGOLDING, H. G., 73-910, 1900
 ZGOLDSTEIN, J. I., 73-3941
 ZGOLES, G. G., 73-598
 ZGOLUBKOV, V. S., 73-268
 ZGOMES, C. B., 73-1470
 ZGOMES, C. DE B., 73-2858
 ZGOMES DA SILVA, F., 73-1985
 ZGONÇALVES, F., 73-1986, 2135, 2136
 ZGONORD, H., 73-1136
 ZGONZALEZ BONORINO, F., 73-2330
 ZGONZÁLEZ DE JUANA, C., 73-2012
 ZGONZÁLEZ-FERRÁN, O., 73-951, 3102
 ZGOODACRE, A. K., 73-846
 ZGOODELL, H. G., 73-2594
 ZGOODWIN, A. M., 73-278
 ZGOODWIN, J. H., 73-2871
 ZGOOLD, L. A., 73-340, 1190
 ZGOOLEY, R. C., 73-2769, 3907
 ZGOOSSENS, P. J., 73-3588, 3623
 ZGOPAL, R., 73-2432
 ZGOPALAN, K., 73-619
 ZGORAI, M., 73-4174
 ZGORBATSCHIEV, G., 73-4008
 ZGORBATSCHIEV, R., 73-2851, 2961
 ZGORDIENKO, L. A., 73-1618
 ZGORDON, T. M., 73-1521
 ZGOREGLYAD, A. V., 73-2499
 ZGORENSTEIN, P., 73-605
 ZGORING, C. A. I., 73-1201
 ZGOR'KOVETS, V. YA., 73-2973
 ZGOROBETS, B. S., 73-1924
 ZGOROGOTSKAYA, L. I., 73-2828
 ZGOROKHOV, I. M., 73-3275
 ZGORTER, E. W., 73-3448
 ZGORZHEVSKIY, D. I., 73-267
 ZGOSLING, A. W., 73-552
 ZGÖSSLING, H. H., 73-1475
 ZGOSSO, G., 73-3175
 ZGOTT, G. B., 73-2308
 ZGOTTARDI, G., 73-1157
 ZGOTTFRIED, D., 73-3791
 ZGOUDIE, A., 73-2307
 ZGOUDEVIS, R. G., 73-575
 ZGOULD, R. W., 73-2293
 ZGOURLEY, J. T., 73-3453
 ZGOUT, R., 73-1550
 ZGOVETT, G. J. S., 73-2308
 ZGOVINDARAJU, K., 73-3344
 ZGOVINDA RAJULU, B. V., 73-3151
 ZGOVINDA RAO SINDHIA, M. R., 73-4258
 ZGOW, A. J., 73-3100
 ZGOYAL, R. S., 73-2502
 ZGRACHEV, A. V., 73-2737
 ZGRADY, J. C., 73-941
 ZGRAESER, S., 73-3366, 4072, 4363
 ZGRAGNANI, R., 73-4141
 ZGRAHAM, A., 73-594
 ZGRAHAM, A. L., 73-1763
 ZGRAHAM, E. K., 73-3729
 ZGRAHAM, J., 73-2889
 ZGRAHAM, R. H., 73-2138, 3157
 ZGRAMLICH, J. W., 73-487
 ZGRANDCLAUDE, P., 73-43
 ZGRANDSTAFF, D. E., 73-2250
 ZGRANGER, H. C., 73-2460
 ZGRANQUIST, W. T., 73-3379
 ZGRANT, N. K., 73-11, 2203, 3034
 ZGRANT, R. W., 73-1740, 2403, 3901
 ZGRANT, W. A., 73-1753
 ZGRANT-TAYLOR, T. L., 73-1135
 ZGRATEROL, M., 73-1874
 ZGRAUERT, B., 73-3283
 ZGRAY, C. H., Jr., 73-3298
 ZGRAY, C. M., 73-1129, 3807
 ZGRAY, F., 73-1257, 1258, 2076
 ZGRAY, N., 73-2764
 ZGRAY, R. S., 73-4291
 ZGRAYSON, M. A., 73-3968
 ZGRAZÁN, A. M., 73-685, 3374
 ZGREAVES, C., 73-2412
 ZGREAVES, G., 73-1910
 ZGREBER, C., 73-978
 ZGREELEY, R., 73-962
 ZGREEN, D. C., 73-539
 ZGREEN, D. H., 73-402, 2573, 2766, 3075
 ZGREEN, G. R., 73-2214
 ZGREEN, H. W., II, 73-633, 2651
 ZGREEN, J. M., 73-106
 ZGREEN, M. E., 73-1423
 ZGREEN, T. H., 73-1527, 3732
 ZGREENBAUM, D., 73-3064
 ZGREENLAND, D. J., 73-173, 427, 3411
 ZGREENLAND, L. P., 73-3791
 ZGREENWOOD, H. J., 73-1521
 ZGREENWOOD, J. C., 73-1784
 ZGREENWOOD, R., 73-983
 ZGREENWOOD, W. R., 73-506, 614, 1024, 1784
 ZGREER, K. M., 73-1899
 ZGRÉGOIRE, C., 73-1823
 ZGREGOR, M., 73-182, 1219
 ZGREGORY, A. G., 73-1511
 ZGREGORY, G., 73-4367
 ZGREIG, J. A., 73-1629
 ZGRESSENS, R. L., 73-1028, 4007
 ZGRESHNER, S. G., 73-2497
 ZGREW, E. S., 73-3197
 ZGRICE, J. D., 73-2888
 ZGRIENAUER, U., 73-2257
 ZGRIEST, D. J., 73-3923
 ZGRIEVE, R. A., 73-3885
 ZGRIFFIN, G. M., 73-4228
 ZGRIFFIN, W. L., 73-1083, 2829, 3062, 3844, 4320
 ZGRIFFIS, R., 73-2522
 ZGRIFFITHS, J. C., 73-245, 2262
 ZGRIFFITHS, W. R., 73-3594
 ZGRIGGS, G. B., 73-1253, 2092
 ZGRIGORENKO, M. V., 73-483
 ZGRIGORENKO, V. A., 73-1865
 ZGRIGORIEV, D. P., 73-640
 ZGRIGOR'YEV, D. P., 73-2792
 ZGRIM, R. E., 73-186
 ZGRINDLEY, G. W., 73-3084
 ZGRMAN, D., 73-3378
 ZGROBLER, N. J., 73-878
 ZGRODZICKI, A., 73-4245
 ZGROENEVELD, D., 73-879
 ZGROH, E. A., 73-30
 ZGRONLIE, G., 73-1968
 ZGROSS, D. L., 73-4278
 ZGROSS, E. B., 73-4372
 ZGROSS, G., 73-1851
 ZGROSS, G. A., 73-3510
 ZGROSS, S., 73-985, 2265
 ZGROSSMAN, L., 73-3970, 3972
 ZGROVER, J. E., 73-2611
 ZGROVES, D. I., 73-3545, 3546, 3613, 3764, 3766
 ZGROVES, R. W., 73-562
 ZGRUBB, P. L. C., 73-681, 1485, 3608
 ZGRUITERS, J. T., 73-1540
 ZGRUNDY, H. D., 73-1302, 2372
 ZGRÜNHAGEN, H., 73-1825
 ZGRUSS, H., 73-3510
 ZGRUSZCZYK, H., 73-3536
 ZGRUZDEV, V. S., 73-1936, 2938
 ZGUCWA, L., 73-3826
 ZGUCWA, R., 73-1245
 ZGUDE, A. J., 3d, 73-810
 ZGUDZ, L. F., 73-2264
 ZGUEBELIN, E., 73-2645

- GUEST, J. E., 73-3083, 4208
 GUHA, R. J., 73-494, 2895
 GUIGUES, J., 73-3629
 GUILLEMIN, C., 73-2388
 GUILLET, B., 73-534
 GUILLON, J.-H., 73-902, 1136
 GUILLOT, P. L., 73-2121
 GUILLOU, J.-L., 73-526, 3529
 GUILLOUX, J., 73-282
 GUIOCHON, G., 73-1194
 GULBRANDSEN, R. A., 73-1715, 2699
 GULSON, B. L., 73-2190
 GULSON, B. L., 73-908, 909, 1994, 3282
 GUNDLACH, H., 73-382
 GUNDSAMBUU, T.S., 73-2499
 GUNN, B. M., 73-1959, 2048
 GUNNER, J., 73-3058
 GUNTER, B. D., 73-3854
 GUNTER, W. D., 73-2615
 GUPTA, A. K., 73-1578
 GUPTA, L. N., 73-648, 649, 691, 715, 898, 1027, 1059, 1060, 1061, 1062, 2141, 2801, 3980, 3981
 GUPTA, R. B., 73-4155
 GURAV, R. P., 73-272
 GUREYEV, V. F., 73-1430
 GURNEY, J. J., 73-596, 2805
 GURSKY, H., 73-605
 GUSHCHINA, A. E., 73-237
 GUT, A., 73-2320
 GUTIERREZ, C., 73-3518
 GUTZOW, L., 73-316
 GÜVEN, N., 73-184, 186, 228
 GUYOT, J., 73-676, 2706
 GUZIEV, I. S., 73-2981
 GYANI, K. C., 73-933, 934
 HAACK, U., 73-341
 HAANTJENS, H. A., 73-3415
 HAAS, C. Y., 73-3444
 HAAS, D. J., 73-3342
 HAAS, H., 73-1547
 HAAS, J. L., Jr., 73-1497, 2562
 HABER, M., 73-4345
 HABERLE, F., 73-2621
 HABUDA, S. P., 73-2443
 HACH-ALI, P. FENOLL, 73-1790
 HADLEY, K., 73-2170
 HADFFY, J., 73-3784, 3804
 HAFNER, S. S., 73-409, 2764
 HAGA, N., 73-1303
 HAGEGEORGE, C. G., 73-1390
 HAGEMANN, R., 73-3781
 HAGERMAN, T. H., 73-2241
 HAGGERTY, S. E., 73-582, 584, 2770
 HÄGGSTRÖM, L., 73-2378, 2832
 HAGNER, A. F., 73-3787
 HAHN, H. H., 73-2071
 HAINES, G. V., 73-3221, 4117
 HAINS, B. A., 73-3111
 HAJI-VASSILOU, A., 73-2666
 HAKADA, S., 73-348
 HAKKARAINEN, T. J., 73-1152
 HALACHNOVA-ANDRUSOVÁ, G., 73-4056
 HALBACH, P., 73-258
 HALD, H., 73-954
 HALE, G. E. A., 73-3094
 HALL, A., 73-500, 501, 1662, 1829
 HALL, H. T., 73-609
 HALL, R., 73-930
 HALL, S. R., 73-3485, 3486
 HALL, W. E., 73-1632, 1638, 3619
 HALLBERG, J. A., 73-905, 3071
 HALLBERG, R. O., 73-521
 HALLER, W. A., 73-76
 HALLGREN, D. S., 73-3260
 HALLS, H. C., 73-4119
 HALPERN, M., 73-516, 2220, 2221, 2222
 HALVORSEN, E., 73-2165
 HAM, W. E., 73-1966
 HAMAD, E., 73-403
 HAMADA, S., 73-348
 HAMAKAR, J. W., 73-1201
 HAMAMOTO, R., 73-21
 HAMANO, Y., 73-2156
 HAMBERGER, K., 73-981
 HAMBLIN, A. P., 73-3411
 HAMEED, A., 73-3687
 HAMEY, J., 73-2198
 HAMEURT, J., 73-863
 HAMID, A., 73-3636
 HAMIL, M. M., 73-2359
 HAMILTON, S. K., 73-1456, 1458
 HAMLIN, A. C., 73-2630
 HAMMOND, J., 73-3252
 HAMTILOVÁ, M., 73-827
 HANCOCK, W., 73-903
 HANDSCHUH, G. J., 73-3852
 HANVELD, N. B. K., 73-1507
 HANG, P. T., 73-165, 3744, 4020, 4021
 HANIF, M., 73-3643
 HANKS, T. C., 73-2649
 HANNA, W. F., 73-3230
 HANNAFORD, W., 73-4117
 HÄNNY, R., 73-3283
 HANSEN, J., 73-1188
 HANSEN, J. W., 73-1013
 HANSHAW, B. B., 73-1723
 HANSON, G. N., 73-1670
 HANSON, R. F., 73-204, 205
 HANUS, V., 73-868, 2016
 HANYKÝR, V., 73-1516
 HAPLARACHCHI, D. J. A. C., 73-3186
 HAQUE, A., 73-3398, 3399
 HAQUE, R., 73-1216
 HARADA, K., 73-726, 729
 HARADA, N., 73-143
 HARADA, T., 73-1089
 HARAKAL, J. E., 73-2227, 2228
 HARAMURA, H., 73-586
 HARAŃCZYK, C., 73-1362, 1419, 3535
 HARDCASTLE, K., 73-3910
 HARDER, H., 73-1230, 2317
 HARDIE, W. G., 73-4137
 HARDY, S. C., 73-324, 1506
 HARGRAVES, R. B., 73-1077, 2032, 3893, 4192
 HARKER, R. I., 73-351
 HARLAND, W. B., 73-4378
 HÄRME, M., 73-1025
 HARMER, W. C. E., 73-2267
 HARMON, R. S., 73-1748, 3875
 HARNIK, A. B., 73-3746
 HARRIS, A. L., 73-2116
 HARRIS, B., 73-605
 HARRIS, D. C., 73-759, 1568, 2896, 2897, 2899, 2900, 3554, 3555, 4063
 HARRIS, J. W., 73-357, 448
 HARRIS, L. A., 73-2387, 2577
 HARRIS, L. D., 73-1393
 HARRIS, L. G., 73-2093
 HARRIS, P. G., 73-4088
 HARRIS, P. J., 73-2556, 2572
 HARRISON, C. G. A., 73-2008
 HARRISON, J. E., 73-1964
 HARRISON, J. M., 73-3001
 HARRISON, R. K., 73-1117, 2964
 HARRISON, T. S., 73-46
 HARSHMAN, E. N., 73-1402
 HART, S., 73-4165
 HARTLEY, M. E., III, 73-2686
 HARVEY, P. K., 73-2280, 2968
 HARVEY, R. D., 73-3651, 3652
 HARWARD, M. E., 73-126, 132, 176
 HASKIN, L. A., 73-70, 3834, 3874, 3915, 3940
 HASLAM, H. W., 73-858
 HASNAIN, I., 73-1080
 HASSAN, F., 73-2639
 HATCH, F. H., 73-3360
 HATCHER, R. D., Jr., 73-3201
 HATHAWAY, J. C., 73-499
 HAUCK, J., 73-3892
 HAUCK, W. C., 73-3203
 HAUGHTON, D. R., 73-1673
 HAUKA, M. T., 73-3346
 HAUR, A., 73-1691
 HAURIE, J. M., 73-80
 HAUSEN, D. H., 73-1781
 HAUSEN, D. M., 73-2308
 HAWKESWORTH, C. J., 73-3280
 HAWKS, P. H., 73-3825
 HAWKS, W. L., 73-3440
 HAWTHORNE, D. G., 73-120
 HAWTHORNE, F. C., 73-1302, 2372
 HAWTHORNE, J. B., 73-1990
 HAYASHI, Y., 73-399
 HAYES, J. B., 73-701, 2254, 2332
 HAYGOOD, C., 73-352
 HAYNES, S. J., 73-3328, 4009
 HAZEN, R. M., 73-2840
 HEAD, P. C., 73-3338
 HEARD, H. C., 73-2568
 HEARN, B. C., Jr., 73-917
 HEATH, G. R., 73-2991, 2992, 2993, 2995
 HECHT, A.-M., 73-1607
 HECHT, N. L., 73-3358
 HEDBERG, L. E., 73-2347
 HEDGE, C. L., 73-2683
 HEEZEN, B. C., 73-2011
 HEIDE, K., 73-3311
 HEIDRICK, T. L., 73-2487
 HEIER, K. S., 73-1, 509, 1037, 3157, 3273, 3916
 HEIGOLD, P. C., 73-3651
 HEIKKINEN, V. K., 73-1152
 HEIMANN, R., 73-367
 HEIMLICH, R. A., 73-1786, 3198, 4200
 HEIN, S. M., 73-2650
 HEINRICH, E. W., 73-1368, 2395, 3541
 HEINRICH, K. F. J., 73-3889
 HEKINIAN, R., 73-4146, 4147
 HELFRICH, K. H., 73-3017
 HELGESEN, J. O., 73-2039
 HELGESON, H. C., 73-1357, 1493, 2558
 HELING, D., 73-4240
 HELLER, L., 73-158
 HELLER-KALLAI, L., 73-190
 HELLEWELL, E. G., 73-4348
 HELMKE, P. A., 73-3874, 3915, 3940
 HELMSTAEDT, H., 73-2045, 3006
 HELZ, A. W., 73-590
 HELZ, R. T., 73-3681
 HEM, J. D., 73-1551, 2580, 2753
 HEMENWAY, C. L., 73-3260
 HEMING, R. F., 73-3092
 HEMINGWAY, B. S., 73-1491, 3667, 3668
 HEMINGWAY, J. E., 73-2077
 HEMLEY, J. J., 73-1609
 HENDEL, Y., 73-3323
 HENDERSON, G., 73-4097
 HENDERSON, G. V., 73-105, 196, 2345, 2346
 HENDERSON, J. B., 73-3130
 HENDERSON, J. H., 73-185
 HENDERSON, K. W., Jr., 73-33
 HENDERSON, P., 73-73
 HENDERSON, W., 73-2709
 HENDRY, R. D., 73-2280
 HENIN, S., 73-2599
 HENISCH, H. K., 73-334
 HENLEY, K. J., 73-2453, 284, 3517
 HENLEY, R. W., 73-2452
 HENLEY, S., 73-2025, 4140
 HENMI, T., 73-3412
 HENNECKE, E. W., 73-3974
 HENRICKSON, E., 73-4210
 HENRY, J. T., Sr., 73-2458
 HENSEN, B. J., 73-402, 2573
 HEPWORTH, J. V., 73-932
 HERBERT SMITH, G. F., 73-1208
 HERBILLON, A. J., 73-3433
 HERITSCH, H., 73-3988
 HERMAN, Y., 73-3154
 HERMES, O. D., 73-3199, 4368, 4369
 HERNÁN, F., 73-4212
 HERPOULOS, C., 73-1884, 3782
 HERPERS, U., 73-3912
 HERR, W., 73-3912
 HERREID, G., 73-2747
 HERRING, A. K., 73-3872
 HERRMANN, A. G., 73-1708, 385
 HERRMANN, D., 73-4346
 HERTZ, P. B., 73-3216
 HERVÉ, F., 73-852
 HÉRY, B., 73-1940
 HERZENBERG, D. L., 73-3899
 HERZOG, G. F., 73-3963
 HESP, W. R., 73-2308
 HESS, B. F. H., 73-2155
 HESTER, N. C., 73-4283
 HETHERINGTON, E. A., Jr., 73, 3299
 HETMAN, J. S., 73-80
 HEUER, A. H., 73-633
 HEWETT, D. F., 73-2464
 HEY, M. H., 73-1932, 2266
 HEY, R. W., 73-972
 HEYDEGGER, H. R., 73-3927
 HEYL, A. V., 73-3573, 3578, 3581
 HEYMANN, D., 73-3938
 HIBBERSON, W. O., 73-2766
 HIBINO, T., 73-398, 399
 HICKMAN, M. H., 73-2203
 HIGASHI, S., 73-1089
 HIGASHIYAMA, K., 73-702
 HIGGINS, G. H., 73-4352
 HIGGINS, M. W., 73-30
 HIGLEY, D. E., 73-3442, 3627
 HIGUCHI, H., 73-505
 HILL, R. J., 73-3502
 HILL, R. L., 73-24
 HILL, W. T., 73-1390, 1392, 1400
 HILLARD, P. D., 73-3586
 HILLS, F. A., 73-541
 HILLS, M. E., 73-337
 HILMER, E. F., 73-2308
 HINTHORNE, J. R., 73-2771
 HIRAGI, Y., 73-387
 HIROWATARI, F., 73-65
 HIRSCHLEBER, H., 73-3233
 HIRST, D. M., 73-3314
 HITCHON, B., 73-1709, 1729, 2732, 2734
 HITES, R. A., 73-1713
 HLADÍKOVÁ, J., 73-1691
 HO, C. O., 73-1741
 HOAGLAND, A. D., 73-1387
 HOBBS, B. E., 73-2565
 HOBSON, A. D., 73-2405
 HOCKLEY, J. J., 73-906

- DA, S. N., 73-3741
 DDER, A. P. W., 73-821
 DGE, R. A. L., 73-4271
 DGES, K., 73-2097
 DGSON, G. W., 73-1710
 DGSON, W. A., 73-2171, 4265
 DSON, F., 73-1248
 DE, D., 73-74, 75
 EFS, J., 73-1690, 1692, 3361
 EKSTRA, H. R., 73-2411
 ERSCH, A. L., 73-385
 EFER, E., 73-3740
 EFER, J. M., 73-2004, 4218
 EFMAN, D. C., 73-488
 EFMAN, G. W., 73-3379
 EFMAN, P., 73-3157
 EFMAN, V., 73-1086
 EFMANN, V., 73-3407
 EMEYR, P. K., 73-596
 GARTH, D. D., 73-1856
 GBERG, E., 73-2278
 LDWAY, M. J., 73-1589
 LDSWORTH, A. R. E., 73-4236
 LDSWORTH, B. K., 73-1237
 LL, R., 73-255, 4062
 LLAND, A. E., 73-2618, 2620
 LLAND, H. D., 73-1523, 1742, 679
 LLAND, J. G., 73-1975, 2021, 2022, 3896
 LLAND, P. T., 73-1752
 LLIDAY, D. W., 73-2526
 LLISTER, L. S., 73-3893
 LLISTER, V. F., 73-1911
 LLOWAY, J. R., 73-3739
 LM, R. F., 73-4335
 LMEFJORD, T., 73-1926
 LMES, R., 73-2308
 LER, W. T., 73-1703
 L, P. F., 73-680
 LUB, V., 73-978
 LUBEC, J., 73-948
 LWERDA, J. G., 73-1480
 LJO, G., 73-1499
 LJO, S., 73-499
 LMA, H., 73-1663
 LNOREZ, J., 73-2299
 LNOREZ-GUERSTEIN, B., 73-2299
 LDD, W. C., 73-3719, 3741
 LOPER, P. R., 73-4134
 LOPER, S. N., 73-3837
 LOPER, O. L., 73-2002
 LPOOD, A. M., 73-2114, 3278
 LPKINS, D. M., 73-1451
 LPKINS, T. E., 73-2444
 LPPS, H. C., 73-2753
 LRIUCHI, H., 73-235
 LRMANN, P. K., 73-2816
 LRN, M., 73-3476
 LRN, P., 73-1120
 LRN, P., 73-1120
 LRN, P., 73-1120
 LROBROOK, E. H. W., 73-545, 565, 566, 569, 571
 LRNER, C., 73-1984
 LRODYSKI, R. J., 73-2148
 LROWITZ, S., 73-2578
 LROWITZ, D., 73-4227
 LRSFIELD, W. T., 73-1041
 LRTON, A. D., 73-3111
 LRTON, M. D., 73-1530
 LRTON, R. M., 73-1530
 LRVATH, D. J., 73-2753
 LRVATH, I., 73-3372
 LRWATH, I., 73-182
 RZ, F., 73-419
 RCHKE, G., 73-2614
 RSKIN, C. M., 73-4267
 RSKING, K. F. G., 73-3507
 RSTERMAN, J. W., 73-2341, 3423
 RSTETLER, P. B., 73-2598
 HOTZ, P. E., 73-2153, 2490
 HOUSLEY, R. M., 73-3901, 4351
 HOUSTON, R. S., 73-1965, 3203
 HOWARD, P. F., 73-1454
 HOWARD, R. W., 73-3262
 HOWARTH, R. J., 73-2308, 2749
 HOWELL, B. F., 73-1494
 HOWELL, J. E., 73-3001
 HOWER, J., 73-199
 HOWER, W. F., 73-163
 HOWIE, A., 73-3452
 HOWIE, R. A., 73-4017
 HOWIE, R. ALAN, 73-3491
 HRMA, P., 73-404
 HROUDA, F., 73-2028
 HSIEH, T., 73-1749
 HSU, K. J., 73-4086
 HUANG, C. K., 73-1867
 HUANG, P. M., 73-123
 HUANG, W. H., 73-148, 204, 311, 1617, 1854, 3688
 HUANG, W. Y., 73-1249
 HUBBARD, N. J., 73-591, 3884
 HUBER, D. R., 73-2150
 HUBERT, A. E., 73-2308
 HUBICKA-PTASINSKA, M., 73-2877
 HUBSCHMAN, J., 73-2086
 HUCKENHOLZ, H. G., 73-4143
 HUDSON, D. T., 73-2789
 HUERTAS, F., 73-133
 HUEY, J. M., 73-3926
 HUFF, W. D., 73-3383
 HUFFMAN, C., Jr., 73-52, 918
 HUGGINS, F. E., 73-646, 3319
 HUGHES, C. J., 73-3077, 4120, 4162
 HUGHES, D. J., 73-2030
 HUGHES, R. E., 73-101
 HUGHES, S., 73-2965
 HUGHES, T. C., 73-3908
 HÜGI, TH., 73-3531
 HULINSKY, V., 73-1777
 HULL, H., 73-3718
 HÜLLER, R., 73-2259
 HULME, G., 73-2782
 HÜLSEMAN, J., 73-2279
 HULSTON, J. R., 73-1134
 HUMBERT, G., 73-1159
 HUNAHASHI, M., 73-1949, 3069
 HUNEKE, J. C., 73-3939, 3959
 HUNT, G. R., 73-1066
 HUNTER, D. R., 73-2470
 HUNTER, R. J., 73-110
 HUNTINGTON, A. T., 73-3084
 HUNZIKER, J. C., 73-3173
 HURLBUT, C. S., Jr., 73-303, 1471, 4077
 HUSAIN, L., 73-607
 HUSLER, J. W., 73-4171
 HUSSAIN, M. S., 73-3417
 HUSSAIN, S. M., 73-2690
 HUSSEIN, H. A., 73-3598
 HUSSEIN, M. K., 73-4042
 HUTCHEON, I., 73-615
 HUTCHINSON, R. W., 73-1480
 HUTCHISON, W. W., 73-844
 HUTTON, D. R., 73-221, 2436, 2819
 HUTTON, J. T., 73-995
 HYDE, B. G., 73-96, 215, 3447
 HYDE, P. J. W., 73-972
 HYNDMAN, D. W., 73-93
 HYNDMAN, R. D., 73-3235
 ICHIKUNI, M., 73-380
 IDE, M., 73-697
 IGETA, M., 73-398
 IGLESIA PEREZ, J. E., 73-1789
 IGLESIAS, J. E., 73-2423
 IGUAL, X. P., 73-1728
 IGUCHI, Y., 73-1783
 IHOCHI, H., 73-3926
 IYAMA, J. T., 73-1611
 IYABA, M., 73-2078
 IKEDA, K., 73-413
 IKORNIKOVA, N. YU., 73-2605
 IKOSHVILI, D. V., 73-2518
 IKRAMUDDIN, M., 73-3041
 ILAVSKY, J., 73-262
 IL'IN, A. V., 73-2532
 IL'IN, N. P., 73-1892
 ILLIES, J. H., 73-2026
 IL'MENEV, E. S., 73-1321
 IL'VITSKIĬ, M. M., 73-1780, 2498
 ILYASHEVA, N. A., 73-1563, 2591
 ILYUKHIN, V. V., 73-1295
 IMAHORI, K., 73-1622
 IMBIMBO, E. S., 73-3846, 3849
 INAN, K., 73-302
 INESON, P. R., 73-1414, 1473
 INGAMMELS, C. O., 73-44
 INGRAM, B. L., 73-45
 INIGUEZ, J., 73-1575
 ININA, K. A., 73-2973
 INOUE Y., 73-389, 399
 INUZUKA, H., 73-94
 IRVING, A. J., 73-1022, 4157
 IRVING, E., 73-3223, 3224, 3225
 ISARD, J. O., 73-3900
 ISAYEVA, K. G., 73-774
 ISENHOUR, T. L., 73-3923
 ISHIBASHI, K., 73-901
 ISRAELACHVILI, J. N., 73-1063
 ITO, J., 73-415, 1585
 ITO, K., 73-3682
 ITÔ, T., 73-94
 IVANITSKIĬ, V. P., 73-1304
 IVANOV, D. N., 73-2980
 IVANOV, I. B., 73-1124
 IVANOV, I. P., 73-423
 IVANOVA, T. I., 73-1597
 IWAI, S., 73-348, 349
 IWAI, S.-I., 73-3717
 IWAO, S., 73-94
 IWASAKI, H., 73-1544
 IWASAKI, I., 73-59, 60
 IWU, G. O., 73-2515
 IYER, S. S., 73-19, 504
 IZARD, J. E., 73-4053
 IZGIZ, S., 73-753
 JACK, R. N., 73-3857
 JACKSON, B., 73-1263
 JACKSON, E. D., 73-610, 813, 961, 2027
 JACKSON, G. D., 73-2233
 JACKSON, K. S., 73-1728
 JACKSON, M. J., 73-994
 JACKSON, M. L., 73-145, 185, 2315, 2316, 3307, 3410
 JACKSON, R. F., 73-3945
 JACKSON, T. A., 73-2595
 JACOB, K. T., 73-3662
 JACOBS, J. W., 73-3940
 JACOBS, P. W. M., 73-2161
 JADHAO, V. G., 73-2582
 JÄGER, E., 73-6
 JAGO, J. B., 73-2214
 JAGOUTZ, E., 73-3929
 JAIN, A., 73-1070
 JAIN, A. K., 73-2980
 JAIN, D. C., 73-1586
 JAKŠ, P., 73-675, 815, 1748, 3875
 JAMBOR, J. L., 73-507, 3547, 3548, 3549, 3550, 3557, 3559, 3560, 3561, 3565
 JAMES, C. H., 73-248, 2308
 JAMES, P. R., 73-2138, 3157
 JAMES, T. C., 73-241
 JAMES, W. J., 73-1338, 2358
 JAMIESON, I. M., 73-2983
 JAN, M. Q., 73-2977, 3036, 3539
 JANG, S. D., 73-161
 JANOT, C., 73-1549
 JANZER, V. J., 73-1171
 JAQUET, J. M., 73-1172
 JAKOVSKÝ, J., 73-4054
 JAROSEVICH, E., 73-3958
 JAROSEWICH, E., 73-627, 1769
 JARRETT, P. M., 73-1267
 JASIEŃSKA, S., 73-2877
 JAVELAS, R., 73-1517
 JAVOY, M., 73-636
 JAWORSKI, A., 73-3859, 3865
 JAYARAM, M. S., 73-891, 4156
 JEFFES, J. H. E., 73-3662
 JEFFREY, J. W., 73-2434, 2435
 JEFFERY, P. M., 73-512
 JENG, W.-L., 73-1707
 JENKINS, R., 73-2294, 3342
 JENKS, W. F., 73-2459
 JENNE, E. A., 73-142, 552, 3703
 JENNI, J. P., 73-1240
 JENNY, V., 73-3366
 JENSEN, M. L., 73-1643, 1718
 JEPSON, W. B., 73-1221
 JÉROME, D. Y., 73-3936
 JERPHAGNON, J., 73-1277
 JOENSUU, O., 73-3785
 JOHAN, Z., 73-1938, 2775, 2945
 JOHANNES, W., 73-424
 JOHNS, R. B., 73-1728
 JOHNS, R. K., 73-2480
 JOHNS, W. D., 73-164
 JOHNSON, B. W., 73-2181
 JOHNSON, D. L., 73-2656
 JOHNSON, D. W., Jr., 73-3702
 JOHNSON, H. P., 73-3696
 JOHNSON, J. E., 73-3502
 JOHNSON, K. R., 73-1900
 JOHNSON, K. S., 73-1366, 1367, 1489
 JOHNSON, L., 73-2006
 JOHNSON, L. J., 73-207
 JOHNSON, L. R., 73-4263
 JOHNSON, M. G., 73-2488
 JOHNSON, N. M., 73-558
 JOHNSON, M. R., 73-1997
 JOHNSTON, R., 73-583, 3362, 3879
 JOLLY, W. T., 73-1007
 JONASSON, I. R., 73-473, 545, 1682, 2308
 JONES, B. G., 73-3128
 JONES, D. L., 73-2996
 JONES, D. W., 73-1313, 2441
 JONES, E. J. W., 73-2194
 JONES, G. K., 73-3443
 JONES, H., 73-2561
 JONES, H. A., 73-2463
 JONES, H. E., 73-3813
 JONES, J. B., 73-1179, 3502
 JONES, J. C., 73-1108
 JONES, J. G., 73-2049
 JONES, J. W., 73-2147
 JONES, K. A., 73-321, 4012
 JONES, L. M., 73-25, 524, 2217, 2685, 2686
 JONES, M. J., 73-2308
 JONES, M. P., 73-2652
 JONES, R. V., 73-3357
 JONGEJAN, A., 73-400, 401
 JONIN, M., 73-862
 JOPLIN, G. A., 73-672, 3074
 JOSHI, M. S., 73-2810
 JOUBERT, J.-C., 73-1553
 JOVANOVIC, S., 73-3902, 3953
 JUAN, V. C., 73-416, 1127, 2100
 JUGLE, D. B., 73-1082
 JULIAN, B. R., 73-2164
 JUROSZEK, C., 73-4330

JUTEAU, T., 73-864

KAADEN, G. VAN DER, 73-743

KABALKINA, S. S., 73-3315

KABESH, M. L., 73-3786, 3797

KABULOVA, A. YA., 73-2735

KABWE, C., 73-56

KACHAN, M. F., 73-3315

KACHI, S., 73-387

KAFRI, U., 73-3123

KAHLE, C. F., 73-2700

KAHLWEIT, M., 73-336

KAIMAN, S., 73-2240

KAKAR, S. K., 73-3037, 3513

KAKITANI, S., 73-1620

KALBSKOPF, R., 73-1334

KALDIS, E., 73-1499

KALININ, D. V., 73-1583

KALININ, L. V., 73-1595

KALININ, S. K., 73-1639, 3783

KALMAN, Z. H., 73-190, 1283,

1284, 1287

KALOCSAI, G. I. Z., 73-3073

KAMEL, M., 73-703

KAMEL, M. R., 73-1476

KAMENSKIY, I. L., 73-1733

KAMINENI, D. C., 73-1009, 2834

KAMPSCHUR, W., 73-3170

KANAH, Y., 73-389

KANAMARU, F., 73-369

KANOURKOV, G., 73-3515

KANTA RAO, P., 73-1433

KANUNGO, D. N., 73-2142

KAPLAN, G., 73-3906

KAPLAN, I. R., 73-533, 1677,

1678, 1679, 3913

KAPOOR, B. S., 73-3419

KAPPELLE, K., 73-3611

KAPUSTIN, YU. L., 73-808, 2951

KARETIN, YU. S., 73-3026

KARICKHOFF, S. W., 73-3381

KARL, F., 73-1794

KARLE, J., 73-2390, 2391

KARNER, F. R., 73-916, 2039

KAROTKE, E., 73-1602

KARPENKOV, A. M., 73-758

KARTASHOV, I. P., 73-1363

KARUNAKARAN, C., 73-835, 1344

KARUP-MÖLLER, S., 73-2893

KARYAKIN, L. I., 73-1584

KARYAKINA, N. F., 73-2418

KASAI, M., 73-348, 349

KASHAYEV, A. A., 73-1323, 2584

KASHCHEYEV, I. D., 73-404

KAŠPAR, P., 73-769, 771, 2903

KASUYA, H., 73-240

KATAYEVA, Z. T., 73-2873

KATEKESHA, F., 73-2299

KATO, A., 73-729, 732, 733, 790,

804, 1885, 2419

KATO, Y., 73-900

KATSUMOTO, N., 73-1089

KATSURA, T., 73-395

KATZ, A., 73-1917

KATZ, L., 73-2370

KATZ, M. B., 73-1052, 2635

KAUFHERR, N., 73-158

KAUL, I. K., 73-2155

KAVARDIN, G. I., 73-268

KAWAGUCHI, H., 73-144

KAWAHARA, A., 73-213

KAYAL, P. B., 73-3388, 3389

KAYE, M., 73-594

KAYE, M. J., 73-3314, 3921

KAYODE, A. A., 73-1420

KAYUPOVA, M. M., 73-2881

KAZAK, A. P., 73-2830

KAZANSKIY, V. I., 73-1124

KAZI, A., 73-3404

KAZMIN, V., 73-4112

KEAYS, R. R., 73-595

KEEN, C. E., 73-3000

KEHLENBECK, M. M., 73-3007,

3008

KEIGHIN, C. W., 73-3580

KEIL, K., 73-2755, 2757, 2769,

2833, 3881, 3935, 4171

KEIL, R., 73-2065

KEITH, S. B., 73-3247

KEITH, T. E. C., 73-3035

KELLER, P., 73-2935

KELLER, W. D., 73-148, 204, 205,

311, 3405, 3409, 3688

KELLNER, H. A., 73-1771

KELLING, G., 73-4051

KELLY, A. M., 73-284

KELLY, J. C., 73-3429

KEMP, A. L., 73-4272

KEMP, R. C., 73-2379

KEMPE, D. R. C., 73-2977

KENDALL, T. A., 73-1265

KENNAN, P. S., 73-653, 3020

KENNEDY, G. C., 73-2601, 2612,

4352

KENNEDY, M. J., 73-3002, 4160

KENNEDY, S. W., 73-2448

KENNEWELL, P. J., 73-994

KEPEZHINSKAS, K. B., 73-700,

3675

KEPEZHINSKAS, V. V., 73-2678

KEPEZHINSKAYA, K. B., 73-355

KERAMIDAS, V. G., 73-96

KERN, H., 73-3722

KERNAGHAN, J. S., 73-3569

KERR, P. F., 73-2333, 2666

KERRICK, D. M., 73-4304

KERRIDGE, J. F., 73-1762

KERSHAW, R. C., 73-3048

KESLER, S. E., 73-2008, 2010,

2308, 2506

KESSLER, T. L., 73-197

KESSLER, T., 73-2703

KESSON, S. E., 73-817

KESTEN, S. N., 73-3568

KEUSEN, H.-R., 73-2124

KHADZHI, V. E., 73-1618

KHALEZOVA, YE. B., 73-744

KHALIL, A., 73-3634

KHALIL, A. A., 73-1572

KHALILI, H., 73-1669

KHAN, A. A., 73-222, 1338

KHAN, A. H., 73-194, 3428, 3637,

3639, 3641, 3644, 4313

KHAN, J., 73-3037

KHAN, M. A., 73-248, 3065, 3127

KHAN, M. S., 73-4074

KHAN, S. N., 73-1378

KHAN, S. U., 73-532

KHAN, Z. A., 73-3644

KHARKAR, D. P., 73-572, 592

KHASGIWALE, K. A., 73-1165

KHATTAB, K. M., 73-2671

KHLESTOV, V. V., 73-355, 2311,

3675

KHMAR, A. YA., 73-3027

KHOL', F. I., 73-737

KHOLEIF, M., 73-4252

KHOMYAKOV, A. P., 73-2667, 2873

KHOURY, S. G., 73-538

KHRENOV, P. M., 73-2971

KIANG, W. C., 73-1617

KIDDER, G., 73-129

KIEFFER, G., 73-2051, 2200

KIEFT, C., 73-770, 4038, 4060

KIER, J. S., 73-3755

KIESLING, T., 73-3569

KIFLAWI, I., 73-1287

KILHAM, P., 73-2925

KILINC, I. A., 73-2547

KIM, C. W., 73-1949

KIM, K.-T., 73-2601, 3750, 3751,

3752

KIMBARA, K., 73-191

KIMBERLIN, J., 73-597

KING, R. P., 73-3522

KING, P. B., 73-3583

KING, G. C. P., 73-3357

KING, B. C., 73-931

KIND, N. V., 73-1126

KINOMURA, N., 73-1614

KIRIKILISA, H., 73-3696

KIPFER, A., 73-95

KIRASIROVA, V. I., 73-1428

KIRFEL, A., 73-1501

KIRICHENKO, L. P., 73-3066

KIRIKILISA, S. I., 73-2475

KIRIYAMA, R., 73-369

KIRK, J. L., 73-2606

KIRK, R. S., 73-2555

KIRKHAM, R. V., 73-2455

KIRKINSKY, V. A., 73-2554

KIRKPATRICK, W. M., 73-1262

KIROV, G. N., 73-2939

KISELEV, A. V., 73-1621

KISHK, F. M., 73-114

KISS, E., 73-672

KISTLER, R. W., 73-2236

KITAMURA, M., 73-225

KITAYAMA, K., 73-395, 414

KITAZAWA, S., 73-1577

KITCHENHAM, B. A., 73-1370

KITTELMAN, L. R., 73-3138

KITTRICK, J. A., 73-134

KITAYAMA, K., 73-3886

KIYOSU, Y., 73-379

KIZAKI, Y., 73-1306

KLAPYTA, Z., 73-1246, 1247, 2320

KLECK, W. D., 73-1861

KLEE, W. E., 73-1337

KLEINHAMPL, F. J., 73-2523, 3298

KLEIN HANEVELD, H. B., 73-1507

KLEINKOPF, M. D., 73-1963, 1964

KLÉMAN, M., 73-1277

KLEMIC, H., 73-798

KLEMM, D. D., 73-3798

KLINGEBEL, A., 73-976

KLINOWSKI, J., 73-1316

KLISSOURANOV, G., 73-3595

KLOBE, W. E., 73-121

KLOMINSKÝ, J., 73-3545, 3613

KLOTCHKOVA, G. N., 73-1608

KLUSMAN, R. W., 73-1182

KLYAKHIN, V. A., 73-765

KNAEBEL, J., 73-2744

KNAKE, D., 73-3850

KNEBEL, H. J., 73-3429

KNIGHT, C. A., 73-3261

KNIGHT, N. C., 73-3261

KNIGHT, R. J., 73-2740, 3897

KNOLL, A., 73-3242

KNOP, O., 73-1331

KNORRING, O. VON, 73-750, 1925,

1946

KNOWLES, C. R., 73-1795

KNOX, E. G., 73-132, 176

KNUDSON, M. I., Jr., 73-3393

KNYAZEY, V. S., 73-3179

KNYAZEVA, D. N., 73-3187

KOARK, H. J., 73-3526

KOBAYASHI, K., 73-1499

KOBÉ, H. W., 73-767

KOBZAREVA, S. A., 73-1504

KOCH, G. S., Jr., 73-244

KOCH, R. C., 73-3809

KOCHETKOV, O. S., 73-2717

KOCHETKOVA, K. V., 73-1890

KOCIAN, J., 73-1930

KODAMA, H., 73-113, 684, 3391

KODAM, O., 73-927

KOERFER, L. E., 73-3291

KOHMAN, T. P., 73-3926

KOIZUMI, M., 73-174, 1614, 1615,

3733

KOLBANTSEV, R. V., 73-1780

KOLMER, H., 73-1685

KOLOBYANINA, T. N., 73-3315

KOLODNY, Y., 73-985, 1678

KOLPACK, R. L., 73-3327

KOLTA, G. A., 73-4042

KOLZOVA, T. V., 73-3277

KOMAROV, A. N., 73-1150

KOMATSU, H., 73-1863

KONDRAT'EV, A. V., 73-758

KONDRAT'YEV, V. A., 73-3150

KONEV, A. A., 73-2800

KONNERT, J. H., 73-2390, 2391

KONNO, H., 73-799

KONONOVA, V. A., 73-3276, 3675

KONSTANTINOV, M. M., 73-1433

KONTA, J., 73-195

KONYSHEVA, R. A., 73-1834

KOPCEKÝ, L., 73-4105

KOPP, O. C., 73-325, 2387

KOPTSIK, V. A., 73-2418

KORIKOVSKIY, S. P., 73-1587

KORTNIG, S., 73-1006, 1837, 2838

KORNEV, A. N., 73-1295

- KRISHNAMACHARLU, T., 73-3070
 KRISHNASWAMI, S., 73-629
 KRISTIN, J., 73-4054
 KRISTMANNSDÓTTIR, H., 73-1005, 4180
 KRIVÝ, I., 73-1571
 KRIZEK, J., 73-3397
 KROGH, T. E., 73-3269, 3282
 KROLL, H., 73-2386
 KROLL, J. M., 73-3402
 KROUSE, H. R., 73-493, 1629, 2732
 KRÜGER, M. M., 73-53
 KRUPICKA, J., 73-3190, 4196
 KRUSE, H., 73-3939
 KRYLOV, N. A., 73-2975
 KRYUKOV, V. D., 73-1126
 KRZANOWSKI, W. J., 73-227
 KUBAS, Z., 73-2263
 KUBISZ, J., 73-1247, 2603
 KUBO, Y., 73-444
 KUCKES, A. F., 73-617
 KUCZYNSKI, G. C., 73-3205
 KUDO, K., 73-3790
 KÜHN, P., 73-1930
 KUKAL, Z., 73-474
 KUL'CHITSKAYA, E. A., 73-4081
 KULICHIKHINA, R. D., 73-2904
 KULICK, C. G., 73-3893
 KULIKOVA, M. F., 73-1631
 KULISH, YE. A., 73-2106
 KULKARNI, S. N., 73-4336
 KULLERUD, G., 73-2590, 2609, 3509, 3707
 KULM, L. D., 73-1253, 2092
 KULYAMIN, L. N., 73-3119
 KUME, S., 73-1614, 1619
 KUNCIR, H., 73-3914
 KUNCIR, J., 73-2797
 KUNO, H., 73-346, 4204
 KUNZENDORF, H., 73-1180, 2308
 KUNÉ, K., 73-1516
 KUNZLER, R. H., 73-2594
 KUPRIYANOVA, I. I., 73-1590
 KURBANOV, A. SH., 73-737
 KURDRAVTSOV, V. A., 73-1017
 KURYUMOV, A. V., 73-2401
 KURMAKAEVA, F. A., 73-755
 KURIMOTO, R. K., 73-3967
 KURODA, I., 73-2981
 KURODA, P. K., 73-1765
 KURODA, Y., 73-1783
 KUROVA, T. A., 73-2873
 KURSTEN, M., 73-890
 KURZE, R., 73-3321
 KUSHEV, V. G., 73-887
 KUSHIRO, I., 73-94, 353, 586, 1593, 1745, 3886
 KUŠIK, R., 73-4311
 KUSMAN, L. A., 73-3695
 KUSSMAUL, S., 73-870
 KUTINA, J., 73-280, 845
 KUTOLIN, V., 73-2664
 KUTYREV, E. A., 73-2299
 KUWANO, N., 73-732
 KUZ'MIN, M. I., 73-2499, 3060
 KUZ'MINA, O. V., 73-1943
 KUZNETSOV, V. A., 73-1597, 2501, 2546
 KUZNETSOVA, L. G., 73-1813
 LÁČEK, M., 73-762, 1868
 LAVASHA, L. G., 73-3957
 LAVSHINA, O. I., 73-2159
 LAVENVOLDEN, K. A., 73-1769
 ABHART, T. P., 73-1955
 ACHENBRUCH, A. H., 73-4178
 ACKA, B., 73-4329
 ADINSKI, B., 73-195
 ADURNER, J., 73-1202
 LADURON, D., 73-1014
 LAFONT, R., 73-2885
 LAGACHE, M., 73-688, 1611
 LAGOVSKAYA, YE. A., 73-3180
 LAHAV, N., 73-150, 2324, 3390
 LAHIRE, D., 73-725, 2478
 LAHUSEN, L., 73-256
 LAIRD, J., 73-659
 LAJZEROWICZ-BONNETEAU, J., 73-1277
 LAKATOS, S., 73-2238, 2239, 3938
 LAKIN, H. W., 73-2308, 2753
 LAL, D., 73-629, 637
 LAL, R. K., 73-4305
 LALOU, C., 73-1695
 LAMAR, J. E., 73-4283
 LAMB, W. E., 73-1754, 2783
 LAMBERT, I. B., 73-535, 2656, 3771, 3813
 LAMBERT, M. B., 73-967
 LAMBERT, R. ST. J., 73-1975
 LAMEYRE, J., 73-720
 LAMOTHE, R., 73-605
 LAMOUROUX, M., 73-1250
 LAMPRECHT, A., 73-96
 LAMPRECHT, G., 73-342, 343, 1576, 2259
 LAM SHANG LEEN, K. C. Y., 73-2308
 LANCET, M. S., 73-625
 LANCUCKI, C. J., 73-2426, 3493
 LANDA, E. A., 73-2972
 LANDA, E. R., 73-3700
 LANG, A. R., 73-1863, 3231
 LANG, B., 73-632
 LANGENBERG, C. W., 73-3171
 LANGER, A. M., 73-2333
 LANGER, K., 73-438, 1501
 LANPHERE, M. A., 73-287, 3202
 LAPANIA, E., 73-1014
 LAPPIN, M. A., 73-4177
 LARGE, R. R., 73-3614
 LARIMER, J. W., 73-3907
 LARIONOV, L. V., 73-3748
 LAROCHELLE, A., 73-4355
 LARRETT, M. J. W., 73-745
 LARSEN, F. K., 73-2416
 LARSEN, O., 73-2192
 LARSON, A. C., 73-1278
 LARSON, E. E., 73-83
 LARSON, S. J., 73-83
 LASIAUNAŠ, J. C., 73-3452
 LASMANIS, R., 73-1101
 LAUSCHER, D. H., 73-1484
 LAUGHON, R. B., 73-1326, 2438
 LAUGHTON, A. S., 73-1969
 LAUL, J. C., 73-595, 613, 2763, 2793, 3905, 3948, 3966, 3967
 LAURA, R. D., 73-3394
 LAURENCE, R. A., 73-1391
 LAURENT, E., 73-4238
 LAURENT, R., 73-4187
 LAVERY, N. G., 73-492, 2955
 LAVES, F., 73-1311, 1312
 LA VOLPE, L., 73-4142
 LAVREAU, J. J., 73-3601
 LAVRENT'YEV, YU. G., 73-1890, 2879, 3068, 3983
 LAW, A. D., 73-2374
 LAWLESS, J. G., 73-345, 1769, 3973
 LAWN, B. R., 73-232
 LAWRENCE, F. O., 73-488
 LAWRENCE, J. R., 73-2716
 LAWRENCE, L. J., 73-3610
 LAWRENSON, I. J., 73-313
 LAWSON, D. E., 73-3019
 LAZARRE, F., 73-1194
 LAZNICKA, P., 73-2451
 LEAKE, B. E., 73-2119
 LEAKE, R. C., 73-2296, 2308
 LEAL, G., 73-1415
 LEARNED, R. E., 73-2308
 LEAVENS, P. B., 73-686, 4078
 LE BAS, M. J., 73-713, 820, 1976
 LEBEDEV, L. M., 73-1720, 1721
 LEBEDEV, V. S., 73-2737
 LEBEDEV, S. I., 73-766
 LEBEDEV, V. N., 73-1499
 LEBEDEV, V. S., 73-2800
 LEBEDINSKIY, V. I., 73-2052, 3121
 LECKEBUSCH, R., 73-1499, 3998
 LECOMTE, P., 73-3810
 LEDENT, D., 73-2205, 2207, 2208
 LEDGER, D. C., 73-4232
 LEE, C. W., 73-1543
 LEE, D. E., 73-1923
 LEE, J. Y., 73-3711
 LEE, K. Y., 73-2537
 LEE HU, C., 73-3917
 LEELANANDAM, C., 73-892, 893
 LEES, G. J., 73-3167
 LEES, W. R., 73-3671
 LEFÈVRE, C., 73-1979
 LEFORT, J. P., 73-824
 LEGGO, M. D., 73-18
 LEGRAND, H. E., 73-1389
 LEGRAND, J. M., 73-2202
 LE GUERN, F., 73-3084, 3085
 LEHMANN, E., 73-3530
 LEHTINEN, M., 73-749, 750, 2884
 LEISHMAN, J., 73-1023
 LEITH, M. J., 73-4148
 LEIKOV YE. P., 73-3184
 LE MAITRE, R. W., 73-1660, 3346
 LE MARSHALL, J., 73-2436
 LE MASURIER, W. E., 73-965, 2218, 3056, 3104
 LEMISH, J., 73-1693
 LEMOALLE, J., 73-2299
 LENDVAY, E., 73-328
 LENHOFF, C. J., 73-1066
 LENORMAND, M., 73-1567
 LENSCH, G., 73-2126
 LEO, G. W., 73-2469, 4127
 LEON, A., 73-1509
 LEONARD, A. B., 73-3434
 LEONARD, B. F., 73-2946
 LEONARD, R. A., 73-695
 LEONARDI, P., 73-620
 LEONI, L., 73-2284
 LE RIBAULT, L., 73-722, 2085, 2086
 LE ROUX, J., 73-116
 LESKO, I., 73-297
 LETNIKOV, F. A., 73-3060
 LETYPOV, N. G., 73-1689
 LEUTWEIN, F., 73-1118
 LEVENSHTYEN, M. L., 73-2475
 LEVIN, J., 73-575
 LEVINSON, A. A., 73-347, 1709, 2733
 LEVY, A., 73-2909
 LEVY, C., 73-720
 LEVY, E. H., 73-1755
 LEVY, R., 73-119
 LEVY, R. L., 73-3968
 LEWIS, A. D., 73-2673
 LEWIS, C. F., 73-3907
 LEWIS, C. F. M., 73-4271
 LEWIS, D. G., 73-173, 427
 LEWIS, J. D., 73-631, 3758
 LEWIS, J. F., 73-2008, 2009, 3098, 3099
 LEWIS, L. C., 73-335
 LEWIS, R. M., 73-2249
 LEWIS, R. S., 73-3963
 LEWIS, V. A., 73-3891
 LEYTHAEUSER, D., 73-2708
 LIBERTY, B. A., 73-2663
 LIEBENBERG, L., 73-756
 LIEBER, W., 73-1203, 4362
 LIEBERTZ, J., 73-2409
 LIESE, H. C., 73-709
 LIGON, D. T., Jr., 73-590, 600, 601
 LIKENS, G. E., 73-558
 LIKHTE, S. D., 73-1076
 LILLJEQUIST, R., 73-2260
 LINARES, J., 73-133
 LINCOLN, J. L., 73-154
 LIND, G., 73-2963, 4350
 LINDBERG, J. D., 73-467
 LINDBLOM, L., 73-1273
 LINDH, A., 73-1533, 2657
 LINDHOLM, R. C., 73-778, 2917
 LINDSAY, J. G., 73-299
 LINDSAY, J. R., 73-4079
 LINDSLEY, D. H., 73-2611, 3894
 LINDSTROM, D. J., 73-598
 LINEBACK, J. A., 73-4278, 4282, 4349
 LINK, R. F., 73-244
 LIPMAN, P. W., 73-2883
 LIPPMANN, F., 73-3363
 LIPPOLT, H. J., 73-1120
 LIPSCHUTZ, M. E., 73-2793, 3924, 3967
 LIRER, L., 73-4207
 LIS, J., 73-7, 10
 LISHNEVSKIY, E. N., 73-1377
 LISITZIN, A. P., 73-2989
 LITOCHEB, J., 73-2880
 LITTLE, H. W., 73-554
 LIU, L.-G., 73-3672
 LIU, M. S., 73-3672
 LIVINGSTON, V. E., Jr., 73-3647
 LIVINGSTONE, A., 73-2965
 LIVSHITS, L. D., 73-3748
 LLOYD, D. J., 73-3213
 LLOYD, E. F., 73-2726
 LLOYD, M. K., 73-170
 LLOYD, N. A., 73-2696
 LO, H.-J., 73-416, 1127, 1858
 LOBACHEV, A. N., 73-1545, 2546
 LOBACH-ZHUCHENKO, S. B., 73-3277
 LOCARDI, E., 73-4108
 LOCK, B. E., 73-4161
 LOCKWOOD, J. P., 73-1466, 2008
 LODEMANN, C. K. W., 73-3842
 LOESCHKE, J., 73-4144
 LOFTI, M., 73-3797
 LOFTUS-HILLS, G. D., 73-3764
 LOGAN, C. T., 73-875
 LOGAN, Ø., 73-2308
 LOHSE, H.-H., 73-2336
 LOMBAARD, R., 73-1190
 LOMBARDI, G., 73-496
 LONG, W. D., 73-4217
 LOPACHAK, G. G., 73-2264
 LOPATIN, B. G., 73-912
 LOPEZ-RUIZ, J., 73-2299
 LÓPEZ SOLER, A., 73-4347
 LORENZ, V., 73-3680
 LORENZONI, E. Z., 73-4015
 LORENZONI, S., 73-4015
 LORIMER, G. W., 73-3999, 4004
 LORIUS, C., 73-1725
 LOSERT, J., 73-2108, 2131
 LOSEV, V. G., 73-3315
 LOUBET, M., 73-1751
 LOUGHNAN, F. C., 73-1090, 1920
 LOUISNATHAN, S. J., 73-231, 2354, 2359, 2360, 2361, 2398
 LOUKINA, S. M., 73-1916
 LOUREIRO, A. R., 73-1469
 LÖVBERG, L., 73-1188
 LOVE, A. H., 73-543, 2693, 3811
 LOVE, L. G., 73-971, 4052
 LOVELL, J. P. B., 73-4232

- LOVELL, V. M., 73-1190
 LOVELOCK, J. E., 73-2654
 LOVENBURY, P. A., 73-1524
 LOVERIDGE, W. D., 73-1139
 LOVERING, J. F., 73-1994, 3908
 LOVERING, T. G., 73-4274
 LOW, P. F., 73-127, 128
 LOW, W., 73-386
 LOWDON, J. A., 73-3292
 LOWENSTAM, H. A., 73-525
 LOWENSTEIN, P. L., 73-2308, 2749
 LOWMAN, P., 73-605
 LOWMAN, P. D., Jr., 73-3889
 LOWRY, D. C., 73-990, 994
 LOZINSKY, J., 73-2924
 LUCA, E., 73-2406
 LUCAS, M., 73-3781
 LUCCHITTA, B. K., 73-2786
 LUCE, E. D., 73-3705
 LUCE, R. W., 73-751
 LUCHKO, A. G., 73-1431
 LUDLAM, S. D., 73-998
 LUEDKE, R. G., 73-2489, 3858
 LUH, M.-D., 73-168
 LUKASHEV, A. N., 73-1820
 LULZAC, Y., 73-3629
 LUMSDEN, D. N., 73-4287
 LUND, N. G., 73-567
 LUNDIN, A. G., 73-2443
 LUPENS, J. A., 73-1648
 LURIE, D., 73-2322, 2323
 LUSK, J., 73-2484
 LYALIKOVA, N. N., 73-1631
 LYGIN, V. I., 73-1621
 LYALIKOVA, N. N., 73-1546
 LYNAS, B. D. T., 73-4099
 LYNCH, J. J., 73-567
 LYON, T. D. B., 73-3278
 LYONS, P. C., 73-1821
- MCANDREW, J., 73-3813
 MCANULTY, W. N., Sr., 73-2514
 MCARDLE, P., 73-4138
 MCATEE, J. L., Jr., 73-37, 3393
 MCBIRNEY, A. R., 73-4193
 MCBRIDE, M. B., 73-124
 MCBRIDE, S. L., 73-1144
 MCCABE, W. J., 73-1134
 MCCALDIN, J. O., 73-3660
 MCCALL, G. J. H., 73-275, 1023, 2309, 2788
 MCCALLISTER, R. H., 73-439
 MCCALLUM, I. S., 73-3885, 3932
 MCCANN, D. M., 73-3234
 MCCARTHY, T. S., 73-596, 877
 MCCAULEY, J. W., 73-3462
 MCCLATCHIE, L., 73-3544
 MCCONNELL, D., 73-1204, 1699, 1701
 MCCONNELL, J. D. C., 73-230, 432
 MCCORD, T. B., 73-2778, 3898
 MCCORMICK, J. E., 73-1395, 1400
 MCCracken, R. J., 73-1256
 MCCRONE, A. W., 73-3809, 3841
 MCCULLOCH, H. W., 73-1369
 MCCURRY, P., 73-2471
 MACDONALD, A. S., 73-3568
 McDONALD, B. C., 73-2074, 4273
 McDONALD, J. A., 73-1443
 McDONALD, J. G., 73-3146
 MACDONALD, R., 73-2813, 3805
 MCDUGALL, S. E., 73-1396
 MACDUGALL, D., 73-27
 MCDUGALL, I., 73-14, 1138, 2209
 McDOWELL, S. D., 73-2574
 MACEK, J., 73-2853, 4312
 MCFADDEN, W. H., 73-1752
 MCFARLIN, P. F., 73-4066
 MCGETCHIN, T. R., 73-3080
- McGILL, G. E., 73-1110
 McGINNETY, J. A., 73-2420
 MCGLYNN, J. C., 73-3225
 MCGONIGAL, M. H., 73-3002
 MCGRAIN, P., 73-1265
 MACGREGOR, I. D., 73-519
 MCGREGOR, V. R., 73-3157
 MACHÁČEK, V., 73-1736, 1788
 MCHARDY, W. J., 73-208
 MCHENRY, J. R., 73-3825
 MCINTOSH, R. A., 73-2524
 MCINTYRE, D. B., 73-3864
 MACINTYRE, I. G., 73-4301
 MACINTYRE, R. M., 73-3280
 MACIOSZCZYK, A., 73-3845
 MCKAY, D. S., 73-614, 3884
 MCKAY, G. A., 73-2759
 MACKAY, J. W., 73-3364
 MCKAY, S. M., 73-598
 MACKIE, J. F., 73-75
 MCKEE, E. H., 73-2683
 MACKENZIE, D. M., 73-2823
 MACKENZIE, F. T., 73-435, 2722
 MACKENZIE, K. J. D., 73-106, 429, 803
 MACKENZIE, R. C., 73-1205
 MACKENZIE, W. S., 73-4268, 4269
 MACKENZIE, W. S(COTT), 73-3880
 McKEOWN, M. C., 73-2969
 MACKIE, P. E., 73-2427, 3721
 MCKINSTRY, H. A., 73-35
 MACKINTOSH, E. E., 73-173, 427
 MCKIRDY, D. M., 73-3817
 MCKYES, E., 73-104
 McLACHLAN, D., Jr., 73-1153
 McLANE, M., 73-3134
 McLEAN, S. A., 73-180
 MACLEAN, W. H., 73-2914, 3704
 McLEAN, W. J., 73-1326, 2438
 McLELLAND, J. M., 73-3196
 McLendon, J. T., 73-2696
 McLEOD, C. R., 73-739
 McLEOD, N. S., 73-3202
 McLEROY, D. F., 73-1468, 3776
 MACNAMARA, E. E., 73-3016
 MacNEVIN, A. A., 73-453
 McNUTT, R. H., 73-4216
 McQUILLIN, R., 73-1951
 McRAE, B. G., 73-2843
 McRAE, N., 73-2791
 MACRAE, N. D., 73-2609
 McREATH, I., 73-3101
 MADHAVAN, V., 73-893
 MAGALHÃES, J. S., 73-1985
 MAGETTI, M., 73-708
 MAGGS, R. J., 73-2654
 MAGLIOLA-MUNDET, H., 73-293
 MAGLIONE, G. F., 73-1938
 MAGNIEN, A., 73-3629
 MAHALIK, N. K., 73-2142
 MAHAWAL, M. S., 73-1040
 MAHER, S. W., 73-1394
 MAIN, J. V., 73-767
 MAINWARING, D. E., 73-1609
 MAJEROWICZ, A., 73-4186
 MAJEROWICZ, J., 73-1075
 MAKANJUOLA, A. A., 73-872
 MAKARENKO, F. A., 73-2704
 MAKAROV, E. S., 73-2350
 MAKAROVA, A. P., 73-1590
 MAKAROVA, T. A., 73-1600
 MAKHARADZE, A. I., 73-2518
 MAKHAYEV, L. V., 73-1838
 MAKOVICKY, E., 73-2914, 3705
 MAKSIMOV, B. A., 73-1295
 MAKSIMOV, YE. P., 73-3086
 MAKINE, I., 73-61
 MAKSOUD, M. A., 73-192
 MALACHER, F., 73-3082
- MALCUIT, R. J., 73-1786, 3198
 MALECI, L., 73-3788
 MALES, P. A., 73-2636, 2637
 MALINOWSKY, I. YU., 73-417
 MALKIN, A. B., 73-2187
 MALLETT, R. C., 73-3331
 MALLICK, D. I. J., 73-4194
 MALLICK, K. A., 73-1694
 MALLIO, W. J., 73-1020
 MALONEY, N. J., 73-2008
 MALPAS, J., 73-3003
 MALPAS, J. G., 73-4162
 MAMEDOV, KH. S., 73-1314
 MAMY, J., 73-115, 3206
 MAMYRIN, B. A., 73-1733
 MANATT, S. L., 73-2784
 MANCHESTER, K. S., 73-3000
 MANCINI, E. G., 73-4332
 MANCUSO, J. J., 73-698
 MANDOUR, A. A., 73-3786
 MANECKI, A., 73-628, 630
 MANETTI, P., 73-1983
 MANHEIM, F. T., 73-4379
 MANN, J. E., 73-1726
 MANNING, P. G., 73-2368
 MANSERGH, G. D., 73-1808
 MANSMANN, M., 73-2445
 MANSOOR AKHTER, S., 73-194, 3644, 4313
 MANUEL, O. K., 73-472, 1732, 1765, 3270, 3974
 MAO, H. K., 73-2773, 2778
 MAPES, R. H., 73-1001
 MARDIX, S., 73-1283, 1284, 1286, 1287
 MARGRAVE, J. L., 73-1154
 MARGULIS, H., 73-1242
 MARIANO, A. N., 73-1871
 MARINER, R. H., 73-731
 MARION, C., 73-720
 MARIOTTI, A., 73-867
 MARKERT, B., 73-1102
 MARKOVA, F., 73-368
 MARKS, L. Y., 73-286, 2490
 MARMO, V., 73-4173
 MAROWSKY, G., 73-77
 MARRELLO, V., 73-3660
 MARRINER, G. F., 73-3730
 MARSH, R. E., 73-1273
 MARSHALL, M., 73-3220, 3459
 MART, J., 73-2496
 MARTIN, H., 73-3810
 MARTIN, H. M., 73-4124
 MARTIN, M., 73-776
 MARTIN, M. R., 73-598
 MARTIN, R. F., 73-1948, 2037
 MARTÍN POZAS, J. M., 73-1919
 MARTÍN VIVALDI, J. L., 73-1415, 1789, 1790
 MARTINI, J., 73-2123
 MARTINI, M., 73-3801
 MARTINOTTI, G., 73-3175
 MARUMO, F., 73-3487
 MARVIN, R. F., 73-2237, 3297
 MARVIN, U. B., 73-3947
 MARZOLF, J. E., 73-997
 MARZUVANOV, V. L., 73-2881
 MASÁR, J., 73-1219, 1606
 MASCINI, M., 73-3339
 MASKE, S., 73-1569
 MASO, J.-C., 73-1517
 MASON, B., 73-1744, 1763, 3958
 MASON, R., 73-930, 3157, 4136
 MASOOD, K., 73-3520
 MASSON, C. R., 73-3468
 MASSON, H., 73-63, 1822
 MASTER, D. J., 73-4152
 MASTINS, H., 73-1179
 MASUDA, A., 73-510, 511, 1672, 2765, 3965
- MATHEWS, R. T., 73-1728
 MATHIEU, C., 73-3436
 MATHISON, C. I., 73-4000
 MATL, K., 73-980
 MATOS ALVES, C. A., 73-2326
 MATSCHINSKI, M., 73-1114
 MATSUBAY, O., 73-1645, 1663, 3803
 MATSUHISA, T., 73-1663
 MATSUHISA, Y., 73-3803
 MATSUKUMA, T., 73-1877
 MATSUMOTO, Y., 73-679
 MATSUMURA, G., 73-3205
 MATSUOKA, K., 73-370
 MATTEUDI, G., 73-3661
 MATTHES, S., 73-1058
 MATTHEWS, D. H., 73-1045
 MATTHEWS, L. E., 73-1113
 MATTHEWS, R. A., 73-3652
 MATTHEWS, R. K., 73-4300
 MATTHEWS, W. H., 73-4358
 MATTSO, P. A., 73-3386
 MATTSO, P. H., 73-2008, 2173
 MATYASH, I. V., 73-1304
 MATZKO, J. J., 73-2184
 MAUCHER, A., 73-255, 2299
 MAUER, F. A., 73-34
 MAUGER, R. L., 73-3768
 MAURY, R., 73-2622
 MAXIM, G., 73-2406
 MAXWELL, C. H., 73-1407
 MAXWELL, I. E., 73-1317
 MAXWELL, J. R., 73-1753, 3837
 MAY, F., 73-3162
 MAYAUDON, J., 73-3763
 MAYDOLE, H., 73-458
 MAYEDA, T. K., 73-555, 3789, 3911
 MAYER, J. W., 73-3660
 MAYO, F., 73-3250
 MAYOR, J. N., 73-2512
 MAYS, B. J., 73-1753
 MAYS, R. E., 73-1923, 2669
 MAYTHAM, D. K., 73-4139
 MAZERAN, R., 73-1852, 4028
 MAZUR, E., 73-2738, 3855
 MAZUR, L., 73-3977
 MAZZI, F., 73-1291, 1296
 MEADOWS, A. J., 73-2794
 MEAGHER, E. P., 73-2947, 3476
 MEDESAN, A., 73-706
 MEDFORD, G. A., 73-2571
 MEDICI, J. C., 73-1095
 MEDJIMOREC, S., 73-3177
 MEDLIN, J. H., 73-2003
 MEEK, L. T., 73-598
 MEGRUE, H. G., 73-2169
 MEHNERT, H. R., 73-2237
 MEHNERT, K. H., 73-1051
 MEHRTEMS, M. B., 73-2308
 MEIDAT, T., 73-1404
 MEIGHAN, I. G., 73-4183
 MEIJERLING, J. L., 73-3693
 MELACK, J. M., 73-2925
 MELAMED, V. G., 73-1017
 MELCHER, G. C., 73-1470
 MELEKSTSEV, I. V., 73-2047
 MELENT'YEV, G. B., 73-2539
 MELENTYEV, I. I., 73-1565
 MEL'GUNOV, S. V., 73-3181
 MELSON, W. G., 73-2990, 4288
 MELTON, C. E., 73-1864
 MENAKER, G. L., 73-1427
 MENCHER, E., 73-4275
 MENCHETTI, S., 73-2422
 MENDELLOVICI, E., 73-3375
 MENENDEZ, R., 73-2231
 MENGEL, J. T., 73-2299
 MEN'SHIKOV, YU. P., 73-4081
 MERETTER, K., 73-3496

- IERING, J., 73-684, 3387, 3452
 IER'KOV, A. N., 73-807, 4081
 IERLINO, S., 73-238, 2384, 2414, 3465, 3469
 IERLIVAT, L., 73-3781
 IERRILL, R. B., 73-1616, 2541
 IERRILL, R. T., 73-3696
 IESOLELLA, K. J., 73-3136
 IESRI, G., 73-147
 IETTA, D. N., 73-3919
 IETZGER, W. J., 73-4276
 IEWHERTER, J. L., 73-488
 IEYER, C., Jr., 73-3882, 3884
 IEYER, H. O. A., 73-1862, 3933
 IEYER, W. T., 73-1169, 2308, 3527
 IEYERHOFF, A. A., 73-4294
 IEYROWITZ, R., 73-2275
 IIAN, I., 73-3036, 3539
 IIAN, S. B., 73-3037
 IICHEL, C., 73-2358
 IICHEL, M., 73-1549
 IICHEL, R., 73-3912
 IICHE, U. McL., 73-2308
 IIDDLEMOST, E. A. K., 73-955
 IIDDLETON, R. M., 73-234
 IIDGLEY, H. G., 73-350
 IIEKLE, A., 73-665
 IIESCH, A. T., 73-2753
 IIHÁLIK, A., 73-182
 IIHÁLIK, P., 73-1906
 IIKHAILOVA, V. A., 73-758, 3150
 IIKHEYENKO, V. I., 73-3067, 3148
 IIKUL'SKAYA, YE. K., 73-1857
 IILES, D. L., 73-390
 IIL'KEVICH, R. I., 73-1827
 IILLAN, S., 73-4235
 IILLER, C. E., 73-4368, 4369
 IILLER, D. K., 73-1765
 IILLER, D. S., 73-2238, 2239, 2714
 IILLER, E. C., 73-72
 IILLER, J. A., 73-1234, 3279
 IILLER, J. D., 73-1388
 IILLER, J. G., 73-149, 3377
 IILLIMAN, J. D., 73-1003, 4379
 IILLS, J. G., 73-103
 IILLS, J. W., 73-2519, 3589
 IILNES, A. R., 73-995
 IILTON, C., 73-754, 917, 1835, 2814
 IILTON, D. J., 73-3976
 IINETTE, J. W., 73-3251
 IINTER, W. E. L., 73-263
 IINTSER, E. F., 73-774
 IIRCHINK, M. F., 73-2975
 IIROPOL'SKAYA, G. L., 73-3118
 IISÁZ, R., 73-929, 1800
 IISZELL, D. L., 73-2380
 IISER, H. D., 73-1835
 IISHIRKY, S. A., 73-2619
 IISHKIN, M. A., 73-3180, 3184
 IISHKOR, R. N., 73-2503
 IISHOVSKÝ, J., 73-1904
 IISRA, C., 73-1552
 IISRA, G. S., 73-894
 IISRA, R. C., 73-528
 IISRA, S. N., 73-3844
 IITCHELL, G. M., 73-1952
 IITCHELL, J. G., 73-1234, 2194, 2197, 2204
 IITCHELL, R. H., 73-493, 1909, 2014, 2868, 2886, 3076, 4175
 IITCHELL, R. T., 73-2753
 IITENKOV, G. A., 73-758
 IITRA, N. K., 73-1166, 3388, 3389
 IITRA, R. P., 73-136
 IITRA, S., 73-658, 3978
 IITTERER, R. M., 73-2715
 MIYASHIRO, A., 73-3986
 MIYAZAWA, S., 73-1544
 MIZUTANI, H., 73-2156
 MO, T., 73-2711
 MOBERLEY, R., Jr., 73-2991, 2992, 2993, 2995
 MODARRESI, H. G., 73-3304
 MODRESKI, P. J., 73-352
 MOEN, W. S., 73-3648
 MOESKOPS, P. G., 73-1380
 MOH, G. H., 73-1562, 3509
 MOHR, P. A., 73-2055
 MOHSEN, L. A., 73-1667
 MOIOLA, R. J., 73-2866
 MOIR, G. J., 73-4033
 MOISEYEV, A. N., 73-1356
 MOLCHANOVA, L. P., 73-2473
 MOLER, R. B., 73-3899
 MOLINA, R., 73-3781
 MOLOTKOV, S. P., 73-1943
 MOLYNEUX, T. G., 73-876
 MOMOI, H., 73-783, 1089
 MONCHOUX, P., 73-1802
 MONDEGARIAN, R., 73-3454
 MONGER, J. W. H., 73-844
 MONNIN, M., 73-3925
 MONROE, W. A., 73-4290
 MONROE, W. H., 73-4076
 MONSEUR, G., 73-251, 2299
 MONSTER, J., 73-475
 MONTAGGIONI, L., 73-3090
 MONTGOMERY, J. H., 73-2947
 MONTIGNY, R. J. E., 73-24
 MONTOTO, M., 73-3873
 MONTOYA, J. W., 73-1610
 MOODY, R. A., 73-2247
 MOOKHERJEE, A., 73-1346, 2160
 MOORBATH, S., 73-3
 MOORE, A. C., 73-2825, 2854, 2876, 3043, 3072, 3807, 4158
 MOORE, C. B., 73-634, 3907, 3975
 MOORE, C. M., 73-2308
 MOORE, D. R., 73-3960
 MOORE, G. W., 73-2761
 MOORE, J. G., 73-286, 2066, 3084
 MOORE, J. M., Jr., 73-1033
 MOORE, P. B., 73-1292, 1340, 2363, 3492, 3501
 MOORE, W. J., 73-287
 MOORHOUSE, W. W., 73-4305
 MORAVEC, J., 73-1571
 MOREAU, J., 73-3591
 MOREAU, J. M., 73-2358
 MORENO, H., 73-3102
 MOREY, G. W., 73-1570
 MORGAN, A. E., 73-338
 MORGAN, B. A., 73-1034, 4318
 MORGAN, D. J., 73-2922
 MORGAN, J. W., 73-587, 595, 613, 2763, 3905, 3949, 3966
 MORGAN, V., 73-4376
 MORGAN, W. R., 73-1010
 MORGENSHTERN, L. E., 73-1870
 MORIKAWA, H., 73-3717
 MORIMOTO, N., 73-235, 376, 1329, 1330, 1558, 3709
 MORIMOTO, R., 73-94
 MORIN, N., 73-3779
 MORRILL, P., 73-3246, 4361
 MORRIS, R. G., 73-1390
 MORRISON, D. A., 73-3884
 MORRISON, G. H., 73-3928
 MORRISSEY, C. J., 73-1883
 MORTEANI, G., 73-786, 4016
 MORTLAND, M. M., 73-175
 MORTON, D. M., 73-3864
 MOSELEY, F., 73-1952, 2023
 MORTON, R. D., 73-1410, 1886, 1909, 1977, 2481, 2507, 2665, 2997, 3294
 MOSER, W., 73-3491
 MOSHKIN, V. N., 73-1056
 MOSIER, E. L., 73-2274
 MOSKALEVA, V. N., 73-1813
 MOSKVIN, V. V., 73-1499
 MOSSLER, J. H., 73-2332
 MOSSMAN, D. J., 73-2171, 3191
 MOSSOP, G., 73-776
 MOTHERSILL, J. S., 73-2694, 3822
 MOTTANA, A., 73-1815
 MOUN, J., 73-3392
 MOUNTJOY, E. W., 73-4301
 MOUSSE, C., 73-1722
 MOVILLE, A., 73-1988
 MOXHAM, R. M., 73-3354
 MOZGOVA, N. N., 73-775
 MOZGOWA, N. N., 73-1945
 MROSE, M. E., 73-798, 917
 MROWEC, S., 73-2263
 MTSCHEDLOW-PETROSSIAN, O. P., 73-3670
 MUAN, A., 73-3892
 MUCHI, M., 73-697, 702
 MÜCKE, A., 73-1941, 2948
 MUDGE, M. R., 73-1963
 MUEHLE, G., 73-1100
 MUEHLENBACHS, K., 73-2718, 2719
 MUELLER, G., 73-1688
 MUELLER, O., 73-70
 MUEFFLER, L. J. P., 73-4289
 MUHLE, M. E., 73-3663
 MUHLING, P. C., 73-16
 MUIR, A. H., Jr., 73-3901
 MUIR, I. D., 73-3795, 3883
 MUIR, J. E., 73-2878
 MUIR, P., 73-594
 MUKANOV, K. M., 73-1630
 MUKHERJEE, A., 73-1046, 4340
 MUKHERJEE, A. D., 73-250, 1878, 4323
 MUKHERJEE, B., 73-1344, 1875
 MUKHERJEE, S., 73-741
 MUKHERJEE, S. K., 73-741, 2321
 MULDER, B. J., 73-2589
 MULLENS, M. C., 73-301
 MULLENS, T. E., 73-3578
 MÜLLER, G., 73-3830, 3843
 MULLER, J. E., 73-28
 MULLER, P., 73-1519
 MULLER, W. F., 73-3735
 MÜLLER, W. F., 73-3474, 3747
 MULLIGAN, R., 73-3792
 MUMENTHALER, T., 73-1240
 MUMPTON, F. A., 73-4297
 MUNIZAGA, F., 73-3102
 MUÑOZ, J. N. G., 73-2012
 MURAT, M., 73-383
 MURATA, K. J., 73-2699, 3726
 MURCHISON, D. G., 73-2082
 MURRAY, B., 73-2983
 MURRAY, H. H., 73-138
 MURRAY, J. W., 73-3004
 MURTHY, A. S. P., 73-3691
 MURSKY, G., 73-915
 MURTHY, G. S., 73-3227
 MURTHY, V. R., 73-609
 MURTY, M. S., 73-2824, 2860
 MURTY, T. V. V. G. R. K., 73-938, 3993
 MUSHKO, O. L., 73-4030
 MUTCH, T. A., 73-622
 MYERS, H. E., 73-3579
 MYERS, J. O., 73-4348
 MYERS, P. B., Jr., 73-3016
 MYINT, U. S., 73-4354
 MYKURA, W., 73-2964, 2965, 3109
 MYRMIN, V. A., 73-774, 1889
 MYSEN, B., 73-694, 2829
 MYSEN, B. O., 73-669, 1037
 NABAIS CONDE, L. E., 73-1985
 NABOKO, S. I., 73-1717
 NABORSCHCHIKOV, V. P., 73-2691
 NAFZIGER, R. H., 73-3727
 NAGANNA, C., 73-937, 1819
 NAGASAWA, H., 73-505, 3802
 NAGASHIMA, K., 73-240, 391, 726, 732, 733, 790, 804
 NAGY, B., 73-498
 NAIDU, M. G. C., 73-795, 4043
 NAIDU, P. P., 73-54
 NAIDU, P. R. J., 73-3289
 NAKAGAWA, R., 73-549
 NAKAI, N., 73-379, 1560, 1718
 NAKAMURA, N., 73-511, 3965
 NAKAMURA, R., 73-143
 NAKAMURA, Y., 73-1745, 3886
 NAKANISHI, N., 73-387
 NAKANO, K., 73-389
 NAKANO, M., 73-3694
 NAKAO, K., 73-729, 733
 NAKAZAWA, H., 73-376, 1329, 1558
 NAKHLA, F. M., 73-3597
 NALDRETT, A. J., 73-281, 1874, 2878, 3725, 4045
 NALOVIC, L., 73-373, 374
 NALWALK, A. J., 73-3756
 NAMDIARIAN, F., 73-3635
 NAQVI, S. M., 73-2690
 NARAIN, H., 73-1081
 NARAIN, S., 73-754
 NARASARAJU, T. S. B., 73-393, 394
 NARAYANASWAMY, S., 73-836
 NARAYANSWAMY, R., 73-19
 NARKELYUN, L. F., 73-2474
 NARYZHNYI, V. I., 73-2981
 NASH, C. R., 73-777
 NASH, D. B., 73-2778
 NASH, J., 73-482
 NASH, J. T., 73-1464, 3621
 NASH, W. P., 73-792, 2928
 NASHAR, B., 73-1996
 NASSAU, S. K., 73-314
 NATERSTAD, J., 73-3273
 NATHAN, Y., 73-98, 2344
 NATIVEL, P., 73-2910, 3090
 NAUGHTON, J. J., 73-487, 3891, 4215
 NAVA, D. F., 73-3943
 NVALE, G. K. B., 73-2090
 NAVROTSKY, A., 73-1495, 2549, 2550
 NAWARA, K., 73-603
 NAWAZ, R., 73-4073
 NAYAK, N. V., 73-153
 NAYAK, V. K., 73-4047
 NAYBORODIN, V. I., 73-1376
 NAYLOR, R. S., 73-2148
 NEALE, E. R. W., 73-1947
 NEARY, C. R., 73-2034
 NECHELYUSTOV, G. M., 73-1889
 NEDOMA, J., 73-3701
 NEDOREZOVA, A. P., 73-807, 4081
 NEETHLING, D. C., 73-2215
 NEGENDANK, J. F. W., 73-921, 3055
 NEHRU, G. E., 73-4166
 NEIHEISEL, J., 73-3425
 NELSON, M. J., 73-4009
 NEKRASOV, I. Ya., 73-3699
 NEKRASOV, YE. M., 73-2500
 NELEN, J. A., 73-2949, 4078
 NELSON, C. H., 73-1451
 NELSON, G. C., 73-3198
 NELSON, S. W., 73-3059
 NEMCHENKO, N. N., 73-2737
 NÉMEC, D., 73-687, 1793, 2128, 2839, 3997
 NÉMEC, L., 73-1513

- NENASHEV, N. I., 73-3067
 NENASHEVA, S. N., 73-1563
 NESBITT, H. W., 73-2615
 NESBITT, R. W., 73-841, 1179, 1781
 NEUHAUS, A., 73-91
 NEUILLY, M., 73-3780
 NEUMANN, E. R., 73-854, 1520
 NEUSCHEL, S. K., 73-288
 NEUVONEN, K. J., 73-2
 NEWCOMB, R. C., 73-2724
 NEWMAN, A. C. D., 73-227
 NEWMAN, J. W., 73-3814
 NEWMAN, R. C., 73-2310
 NEWNHAM, R. E., 73-3214, 3462, 4003
 NEWTON, R. C., 73-1743, 3895
 NGONGO, M., 73-2299
 NHA, C. T., 73-3536
 NICHIPORUK, W., 73-3907, 3975
 NICHOL, I., 73-1738, 2308
 NICHOLLS, C. J., 73-1280
 NICHOLLS, G. D., 73-1183
 NICHOLLS, I. A., 73-3680
 NICHOLLS, J., 73-354
 NICHOLSON, R., 73-3272
 NICHOLSON, R. A., 73-3338
 NICKEL, E. H., 73-1642, 2891, 2921, 2941
 NICOL, A. W., 73-3730
 NICOL, M. J., 73-339
 NICOLAS, A., 73-824, 2027
 NICOLAS, D. J., 73-50
 NICOLAS, J., 73-300
 NICOLETTI, M., 73-4250
 NIEF, G., 73-3780, 3781
 NIELSEN, H., 73-3772
 NIELSEN, N. A., 73-2492
 NIELSEN, R. L., 73-1649
 NIELSON, D. L., 73-4317
 NIGGLI, E., 73-2180, 3366
 NIGRINI, A., 73-1610, 2570
 NIKITIN, V. P., 73-2971
 NIKITINA, I. B., 73-1721
 NIKOLAEVA, E. P., 73-1865
 NIKOLAEVA, L. E., 73-1320
 NIKOLAYCHUK, G. V., 73-3699
 NIKOLEYEVA, A. V., 73-484
 NIKON COOPER, S. B., 73-449
 NIKONOV, O. I., 73-3028
 NILSEN, O., 73-250, 2111
 NILSSON, Ö., 73-2189
 NISHIDA, T., 73-213, 214
 NISHIGUCHI, K., 73-1329, 1330
 NISHIMURA, Y., 73-446, 447
 NISSEN, A. L., 73-1796
 NISSENBAUM, A., 73-533, 1677, 1678, 1679, 2713
 NYOGI, R. K., 73-939
 NOBES, M. J., 73-1753
 NOBLE, D. C., 73-1657, 2683, 3804
 NOCKOLDS, S. R., 73-3794
 NOËL, D., 73-973, 974, 998
 NOE-NYGAARD, A., 73-954
 NOGUCHI, K., 73-549
 NOIZET, G., 73-2139
 NOKLEBERG, W. J., 73-3052
 NOONER, D. W., 73-1726
 NORDRUM, F. S., 73-1888
 NORMAN, D. W., 73-2240
 NORMAN, J. M., 73-84
 NORRIS, R. M., 73-3808
 NORTHUP, A., 73-3207
 NORTHUP, M. A., 73-1173
 NORTON, D. R., 73-52
 NORTON, E., 73-2169
 NORWOOD, J. E., 73-2633, 3249
 NOSKE-FAZEKAS, G., 73-2857
 NOSYREV, I. N., 73-1664
 NOTHOLT, A. J. G., 73-292, 3627
 NOVÁK, F., 73-666, 730, 1868, 1903
 NOVÁK, I., 73-3376, 3378
 NOVÍK, V. K., 73-2418
 NOVELLI, G., 73-1243
 NOVOKHATSKIY, I. P., 73-269
 NOVOTNÝ, M., 73-31
 NOWACKI, W., 73-233, 772, 1332, 1335, 3487
 NOWAK, J. M., 73-3839
 NOWOK, J., 73-3701
 NOZAWA, T., 73-22
 NRIAGU, J. O., 73-3720
 NUBER, B., 73-459, 805, 1576, 1939
 NUNZI, A., 73-3495
 NURISHI, Y., 73-398, 399
 NUTT, M. J., 73-1952
 NUTT, M. J. C., 73-2967
 NYEIN, U. K., 73-274
 OAKS, R. Q., Jr., 73-2246
 OANA, S., 73-1718
 OBERBECK, V. R., 73-1109, 2186
 OBERLIN, A., 73-135, 426
 OBI, D. V. C., 73-66
 OBIAL, R. C., 73-2308
 OBOLENSKIY, A. A., 73-2501, 2661
 OBRADOVICH, J. D., 73-1964, 4217
 O'BRIEN, J. P., 73-4005
 O'BRIEN, N. R., 73-151
 O'CONNOR, T. P., 73-3558
 ODEKIRK, J. R., 73-2308
 ODIN, G.-S., 73-202
 ODOM, I. E., 73-3439
 OEN, I. S., 73-770, 4038, 4060
 OERTEL, G., 73-41, 1655, 3463
 OERTLE, L., 73-3245
 OFFIELD, T. W., 73-621
 OFTEDAHL, C., 73-970
 OFTEDAL, I., 73-651, 3765
 OGDEN, D. G., 73-1254
 OGDEN, J. M., 73-2628
 OGIMURA, Y., 73-804
 O'GORMAN, J. V., 73-546
 OH, K. D., 73-3717
 O'HARA, M. J., 73-443
 OHASHI, S., 73-212
 OHASI, Y., 73-1299
 OHLE, E. L., 73-1457, 3514, 3568
 OHMASA, M., 73-233, 1332
 OHMOTO, H., 73-1629, 1635, 3767
 O'HORO, M. P., 73-2404
 OHTA, T., 73-214
 OHYA, Y., 73-1293, 1327
 ØIEN, A., 73-3329
 OJAKANGAS, R. W., 73-3426
 OKA, S. S., 73-670
 OKADA, A., 73-626
 OKADA, H., 73-499, 4220
 OKAZAKI, R., 73-3095
 O'KEEFE, J. A., 73-643, 1749
 O'KEEFE, M., 73-96, 215
 O'KELLEY, G. D., 73-3930
 OKRUSCH, M., 73-1058
 OKUDA, H., 73-1535
 OKUDERA, S., 73-65
 OLADE, M. A. D., 73-2997
 OLBRECHT, A. J., 73-2357
 OLD, R. A., 73-12
 OLDFIELD, J. E., 73-2753
 OLEJNÍK, S., 73-172, 1226
 OLIVER, H. W., 73-286
 OLIVER, R. L., 73-497, 1781
 OLSEN, D. R., 73-1799, 2812
 OLSEN, E., 73-627
 OLSEN, E. J., 73-1743
 OLSON, R. E., 73-147
 OMENETTO, P., 73-2495, 4095
 OMORI, T., 73-1831
 ONDRA, P., 73-2679
 O'NEIL, J. R., 73-555, 1021, 3910
 O'NEILL, J. B., 73-3212
 O'NEILL, M. J., 73-1178
 ÖNER, Ö., 73-3594
 ONG, P. T., 73-81
 O'NIORS, R. K., 73-1, 2762, 3280, 3458
 ONO, A., 73-1039
 ONTOEV, D. O., 73-1942
 ONUKI, H., 73-900
 ONUMA, N., 73-3911
 OPLETAL, M., 73-818
 O'REILLY, S. Y., 73-1958
 ORGANOVA, N. I., 73-1943
 ORGEL, L. E., 73-3852
 ORLIAC, M., 73-2846
 ORME, G. R., 73-2080
 ORMEROD, E. C., 73-3371
 ORÓ, J., 73-1726
 ORREN, M. J., 73-596
 OSAWA, M., 73-598
 OSBORN, E. F., 73-363, 3892
 OSBORN, T. W., 73-3969
 OSHIMA, T., 73-94
 OSIPOVA, G. A., 73-2879
 OSOKIN, YE. D., 73-4030
 OSSAKA, J., 73-348, 349
 OSSWALD, G., 73-605
 OSTIC, R. G., 73-3926
 OSTLAND, H. G., 73-2217
 OSTLE, D., 73-1192
 OSTROM, M. E., 73-3653
 OSTROMECKI, A., 73-4145, 4247, 4248
 OSTROWSKI, C., 73-3494
 OTTAVIANI, G., 73-3660
 OTTEMANN, J., 73-459, 655, 743, 748, 805, 1934, 1939, 2906, 2940, 4058, 4059, 4061
 OTTENBURGS, R., 73-2592
 OTTENSMEYER, F. P., 73-2357
 OTTMANN, F., 73-2075
 OTTO, H. H., 73-372
 OTTO, J. D. T., 73-822
 OUDAR, J., 73-1499
 OUGHTON, J. H., 73-2629
 OULTON, T. D., 73-149, 3377
 OVCHAREK, E. S., 73-3184
 OVCHINNIKOV, L. N., 73-2308
 OVCHINNIKOVA, O. N., 73-1595
 OVERSBY, V. M., 73-86, 471, 1129, 2056, 2063
 OWEN, D. C., 73-432
 OWEN, L. M., 73-4096
 OWENS, D. R., 73-2890, 2896, 2897
 OWENS, J. P., 73-4284
 OXBURGH, E. R., 73-3280, 4091
 OYAWOYE, M. O., 73-872
 OZARD, J. M., 73-3295
 OZAKI, M., 73-668, 1089
 OZAWA, T., 73-59
 OZAROVA, N. A., 73-1717, 3957
 OZIMO, M., 73-3790
 PAAKKOLA, J., 73-856
 PABST, A., 73-2814, 2912, 3500
 PACES, T., 73-3853
 PADALINO, G., 73-2299, 3533
 PADĚRA, K., 73-769, 826
 PADGHAM, R. C., 73-4263
 PAEPE, R., 73-3435
 PAGANO, R., 73-1085
 PAGE, N. J., 73-918, 1652, 3052, 3784, 4044
 PAGE, R. W., 73-2209
 PAI, S. I., 73-1749
 PAINE, W. R., 73-4294
 PAJĄCZKOWSKA, A., 73-331, 332, 1531
 PAL, S., 73-19, 504
 PALACAS, J. G., 73-2276, 2693
 PALAIN, C., 73-977
 PALIVCOVÁ, M., 73-868, 2016
 PALMER, R. A., 73-1395
 PALOMARES, J., 73-3903
 PAMIĆ, J., 73-3177
 PANDE, I. C., 73-1027, 4337
 PANDEY, G. C., 73-528
 PANDYA, M. K., 73-933, 1040
 PÁNEK, Z., 73-3728
 PANICHEV, N. A., 73-489
 PANKHURST, R. J., 73-2762
 PANKIVSKIY, K. A., 73-2064
 PANTALONI, A., 73-4
 PANTÓ, GÁBOR, 73-761
 PANTO, GYÖRGY, 73-761
 PAPADAKIS, A., 73-1901
 PAPEZIK, V. S., 73-3131, 4302
 PAPIKE, J. J., 73-1300, 1301, 2773, 3894
 PAPKE, K. G., 73-181, 705
 PAQUET, H., 73-1251
 PARASKEVOPOULOS, G., 73-655
 PARDOE, G. W. F., 73-83
 PAREEK, H. S., 73-1011
 PARFENOFF, A., 73-3629
 PARHAM, W., 73-3422
 PARIBOK, V. I., 73-2815
 PARK, C. F., Jr., 73-3582
 PARK, J. K., 73-3223, 3224, 3225
 PARKER, J. M., 73-230, 3475
 PARKER, P. L., 73-2707, 3814
 PARKER, R. B., 73-1913
 PARKER, S. G., 73-1499
 PARKS, G. A., 73-1548
 PARKS, T. C., 73-2889
 PARRY, W. T., 73-2347, 3437, 3761
 PARSLEY, A. J., 73-1737
 PARSONS, B. M., 73-1255
 PARSONS, I., 73-1972, 2849
 PARTHASARATHY, R., 73-1165
 PARTHÉ, E., 73-3490
 PASSAGLIA, E., 73-4034
 PASSAQUI, B., 73-2846
 PASTEELS, P., 73-2208
 PASTOOR, D. W., 73-3568
 PASUTIN, I., 73-1087
 PATALAKA, YE. I., 73-3158
 PATCHEN, D. G., 73-3316
 PATEL, A. R., 73-333
 PATEL, C. C., 73-249
 PATEL, J. R., 73-3452
 PATTERSON, M. S., 73-2565
 PATINO, M. T. M., 73-1575
 PATTERSON, N. H., 73-3412
 PAUL, D. K., 73-2572
 PAUL, G. L., 73-2413
 PAULO, A., 73-2517
 PAVELESCU, L., 73-661
 PAVELESCU, M., 73-661
 PAVILLON, M. J., 73-2662
 PAVLENKO, V. S., 73-2140
 PAVLISHIN, V. I., 73-2850
 PAVLOV, A. L., 73-2661
 PAVLOVA, T. G., 73-1123
 PAWLEY, G. S., 73-2400
 PAWLOWSKA, J., 73-344
 PAYSON, H., Jr., 73-4275
 PEACHEY, D., 73-2296
 PEACOCK, J. D., 73-2101
 PEACOR, D. R., 73-801, 2393, 2394
 PEAKE, E., 73-1710
 PEARL, R. M., 73-1097
 PEARSON, D. E., 73-4343
 PEARSON, W. B., 73-1272
 PECHT, I., 73-2324
 PECKETT, A., 73-608, 2950, 3899
 PEDERSEN, A. K., 73-954

- INADOR FERNANDES, A., 73-1986
 KERIS, C. L., 73-2162
 L., J., 73-251, 2299
 LCZAR, A., 73-3826
 LET, R., 73-159
 LLY, I. Z., 73-2793, 3924, 3967
 MBERTON, H. E., 73-4371
 PPLINKHOUSE, H. J., 73-2540, 3646
 RAMI, R., 73-2655, 3508
 RCHUK, L. L., 73-3674
 REZ, J. E. IGLESIA, 73-1789
 RICHAUD, J.-J., 73-2177
 RINET, G., 73-2885
 RING, K. L., 73-635, 3777
 RINKS, R. D., 73-4225
 RMINGEAT, F., 73-2846
 RRAULT, G., 73-1298, 2802
 RRIN, B., 73-1517
 RRODON, A., 73-2073
 RROTT, I. H., 73-1010
 RRRY, D., 73-3690
 RRRY, E., 73-199
 RRRY, E. A., Jr., 73-572
 RRRY, E. C., Jr., 73-475, 556
 RRSSEL, E. A., 73-752, 1914
 RRSOZ, F., 73-1239
 RRSOON, C., 73-2193
 RTHUISOT, J.-P., 73-780
 RTRLIK, F., 73-1336, 3480
 RRTTUNEN, V., 73-1025
 RSKIN, V. F., 73-1545
 RŠKOV, YE. G., 73-3182
 RTERS, H., 73-3850
 RTERS, T., 73-1240
 RTERSEN, U., 73-1659
 RTERSON, D. L., 73-1702
 RTERSON, E., 73-1769
 RTERSON, N. V., 73-30
 RTERSON, P. J., 73-3867
 RTERBRIDGE, R. T., 73-1010
 RTRASCHECK, W. E., 73-788, 1341
 RTRIK, F., 73-4249
 RTRIOV, V. P., 73-3748
 RTRIOVA, T. L., 73-2428
 RTRIOVA, V., 73-3595
 RTRIOVSKAYA, N. L., 73-1731
 RTRIOVSKAYA, N. V., 73-1866
 RTRIOVSKI, C., 73-1655, 3913
 RTRUK, W., 73-3547, 3548, 3551, 3552, 3553, 3554, 3555, 3556, 3563, 3564
 RVEZNER, M. A., 73-2168
 REIFFER, D. E., 73-698
 RIFFELMANN, J. P., 73-3602, 3779
 RHAKEY, P. P., 73-41, 2371, 2394, 3463, 3944
 RILBIN, P., 73-1186
 RILEN, O. D., Jr., 73-167
 RILIP, G., 73-4254, 4256
 RILIPPOT, J.-C., 73-3936
 RILIPHS, C. H., 73-1465
 RILLIPS, E. R., 73-3047, 3152
 RILLIPS, J. C., 73-2351
 RILLIPS, J. D., 73-2194
 RILLIPS, M. W., 73-3471, 3473
 RILLIPS, R., 73-2529, 2950, 3896
 RILLIPS, W. E., 73-4160
 RILLIPS, W. J., 73-243
 RILPOTIS, J. A., 73-599, 1671, 3918, 3943
 RIONG, D. X., 73-3536
 RICARD, M. D., 73-3141
 RICCARDO, G. B., 73-4188
 RICCARRETA, G., 73-4142
 RICH, J., 73-3845
 RICHAMUTHU, C. S., 73-1043, 4341
 RICHLER, H., 73-870
 PICOT, P., 73-2177, 2178, 2945, 3629
 PIDGEON, R. T., 73-1115, 2195, 3278
 PIERCE, J. W., 73-4288
 PIERCE, K. L., 73-4217
 PIERROT, R., 73-1937, 2177, 2178, 2945
 PIETRACARPINA, A., 73-1243
 PILIPENKO, A. T., 73-55
 PILKEY, O. H., 73-3144, 3755, 4298
 PILLAI, N. V., 73-3848
 PILLINGER, C. T., 73-1753, 3837
 PINCKNEY, D. M., 73-2670, 3774
 PINTA, M., 73-373, 374
 PIPER, J. D. A., 73-2167, 4206
 PIRIOU, B., 73-2364
 PIRMOLIN, J., 73-4094
 PIRYUTKO, M. M., 73-57
 PIŠA, M., 73-1691
 PISARČIK, M., 73-3378
 PISKUNOV, B. N., 73-1836
 PISKUNOV, V. N., 73-3122
 PITCHER, W. S., 73-949, 950, 1206
 PITMAN, J. K., 73-2005
 PITTMAN, E. D., 73-4287
 PIWINSKI, A. J., 73-1526, 1948
 PLANT, A. G., 73-3006, 3888
 PLANT, J., 73-2308, 2752, 3856
 PLATEN, H. VON, 73-1984
 PLIHAI, M., 73-3499
 PLOSHKO, V. V., 73-3187
 PLUGER, W. L., 73-2308
 PLUMMER, C. C., 73-4018
 PLUMMER, L. N., 73-294
 PLUTH, J. J., 73-2365, 2397
 PLYAKIN, A. M., 73-2717
 POBEDIMSKAYA, E. A., 73-1294, 2437
 POBÉGUIN, T., 73-752, 1797, 4048
 PODOL'SKIY, YU. V., 73-886
 PODOSEK, F. A., 73-638, 3939, 3959
 PODPORINA, YE. K., 73-1665
 PLOCHNIEWSKI, Z., 73-3845
 PODWYSOCKI, M. H., 73-1012
 PODZOROVA, D. I., 73-1038
 POGREBNYAK, YU. F., 73-1773
 POHLANDT, C., 73-2273
 POHN, H. A., 73-1759, 2787
 POINDEXTER, O. F., 73-4124
 POKHILENKO, N. P., 73-3983
 POLIFKA, J. R., 73-3755
 POLIZZANO, C., 73-2299
 POLLACK, J. B., 73-1105
 POLLOCK, J. P., 73-3618
 POL'SHIN, E. V., 73-1304
 POLYAKOVA, T. P., 73-2881
 POLYKOVSKI, V. S., 73-1870
 POMÁRLEANU, V., 73-1988
 PONCELET, G., 73-3763
 PONNAMPERUMA, C., 73-345, 635, 1769, 3973
 PONOMAREV, V. I., 73-1294
 PONTONNIER, L., 73-2447
 POPESCU, G., 73-3355
 POPOLITOV, V. I., 73-1545
 POPOV, V. M., 73-2299
 POPOVA, V. A., 73-2140
 POPP, R. K., 73-1596
 PORCELLI, C., 73-4207
 PORRAL, G., 73-3661
 PORTEOUS, W. G., 73-4325
 PORTER, S. C., 73-964
 PORTHEINE, J. C., 73-3455
 PORTNOV, A. M., 73-1321, 1924, 2930
 PORTUGAL FERREIRA, M., 73-2791
 POSNER, A. M., 73-172
 POSPELOVA, L. N., 73-3068
 POST, J. L., 73-209, 4018
 POSTER, C. K., 73-3065
 POSTNIKOV, D. V., 73-3178
 POTENZA, R., 73-3868
 POTENZA BIANCHI, B., 73-4332
 PÖTSCHKE, J., 73-315
 POTTER, J. F., 73-4233
 POTTER, H. C., 73-3014
 POTTER, N. M., 73-3928
 POTTS, M. J., 73-2000
 POTY, B., 73-1523
 POUBA, Z., 73-1015
 POUBOVÁ, M., 73-1818
 POUGH, F. H., 73-2634
 POULAIN, P.-A., 73-2178
 POUPÉAU, G., 73-3290
 POUTIERS, J., 73-3222
 POVARENENYKH, A. S., 73-1333
 POVONDRA, P., 73-665, 1804, 2803
 POWELL, J. L., 73-2203
 POWELL, T. G., 73-3817
 POZAS, J. M. MARTÍN, 73-1919
 PRABHU, N., 73-629
 PRAKASH VARMA, S., 73-2579
 PRANDL, W., 73-217, 218
 PRASADA RAO, C., 73-4026
 PREDALI, J.-J., 73-1189
 PRESLEY, B. J., 73-1677, 1678
 PRESNALL, D. C., 73-310
 PRESS, N. P., 73-84
 PRESTON, J., 73-1970
 PRESTVIK, T., 73-1967, 2175
 PRETO, V. A. G., 73-1032, 2146
 PRETTI, S., 73-2299, 3533
 PREWITT, C. T., 73-1300, 1301
 PRIBIL, R., 73-3324
 PRICE, P. B., 73-615, 2298, 3944
 PRICE, R. A., 73-1962
 PRICE, R. C., 73-3075, 3796
 PRIDE, D. E., 73-3787
 PRIJANA, 73-1657
 PRINS, P., 73-740
 PRINZ, M., 73-2755, 2757, 2769, 3881, 3935
 PRINZLAU, I., 73-2192
 PRIVETT, D. R., 73-707
 PROCHÁZKA, J., 73-826
 PROCYSHYN, E. L., 73-2230
 PROFI, S., 73-4010
 PROKHOROV, I. G., 73-2327
 PROKHOROV, V. G., 73-2158
 PROPACH, G., 73-1956
 PROST, R., 73-122
 PROSTKA, H. J., 73-3097
 PROST-MARECHAL, F., 73-3781
 PRUDNIKOV, YE. D., 73-2852
 PRYCE, M. W., 73-396, 797, 3995
 PRYOR, A. W., 73-2413
 PRZYBYLOWICZ, T., 73-4244
 PUCHELT, H., 73-2299
 PUCKETT, A. M., 73-2865
 PUDOVKINA, Z. V., 73-3482
 PUGH, M. J., 73-1772
 PUHAN, D., 73-3740
 PULVERTAFT, T. C. R., 73-3157
 PUPIN, J.-P., 73-1785, 1787
 PURDY, B., 73-1112
 PURDY, J. W., 73-1146, 3284
 PURTSCHELLER, F., 73-1202
 PURVIS, A. C., 73-1996
 PUSHCHAROVSKII, D. YU., 73-2437
 PUSHKAR, P., 73-2008
 PUTMAN, G. W., 73-3622, 3773
 PUUSTINEN, K., 73-855
 PUYO, M., 73-80
 PYATENKO, YU. A., 73-3482
 PYATIKOP, P. D., 73-1584
 PYRIH, R. Z., 73-1170
 QAISER, M. A., 73-3428, 3637, 3639, 3641, 4313
 QUADRO, F., 73-4365
 QUAGLIATA, C., 73-2352
 QUAISER, M. A., 73-194
 QUAKERNAAT, J., 73-3317
 QUÉRÉ, Y., 73-3452
 QUICK, D. H., 73-1380
 QUIGLEY, R. M., 73-2334
 QUIJANO-RICO, M., 73-3929
 QUINLAN, J. F., 73-3833
 QUILTY, P. G., 73-2214
 QUINLIVAN, W. D., 73-1961
 QUINN, J. G., 73-3836
 QUIRK, J. P., 73-130, 172, 418, 3738
 QUIRT, S., 73-1144
 QURESHI, A. A., 73-3519
 QURESHY, M. N., 73-1080
 RAASE, P., 73-1794, 3962
 RABIKHANUKAYEVA, YE. S., 73-3117
 RADCHENKO, N. S., 73-889
 RADCLIFFE, S. V., 73-633
 RADHAKRISHNA, B. P., 73-2875
 RADHAKRISHNAMURTY, C., 73-1076
 RADTKE, A. S., 73-1647, 1884, 1887, 3782
 RAFIQUE, M., 73-3642
 RAFTER, T. A., 73-1135, 3774
 RAGLAND, P. C., 73-2044
 RAHEIM, A., 73-1115, 4320, 4321
 RAHILL, R. L., 73-52
 RAI, K. N., 73-1288
 RAI, R., 73-2402
 RAITH, M., 73-2816
 RAJA, P. K. S., 73-1076
 RAJAGOPALAN, G., 73-637
 RAJU, R. D., 73-1432
 RAMAMOAHNA RAO, T., 73-1627
 RAMA MURTHY, V., 73-609
 RAMANATHAN, S., 73-2143
 RAMA RAO, G. V. S., 73-4043
 RAMASWAMY, A., 73-2824, 2860
 RAMBERG, H., 73-1073
 RAMBERG, I. B., 73-1842, 2958, 4350
 RAMBOUSEK, V., 73-437
 RAMSAY, D. M., 73-2107
 RAMSDEN, A. R., 73-903
 RANA, A. A., 73-3642
 RÁNDÁ, Z., 73-2797, 3914
 RANDALL, B. A. O., 73-4131, 4132
 RANDAZZO, A. F., 73-4304
 RANDLE, K., 73-598
 RANGE, K. J., 73-3742
 RANKIN, D., 73-3229
 RANKIN, D. S., 73-3235
 RANSFORD, G., 73-2780
 RAO, A. B., 73-3806
 RAO, B. K., 73-1437
 RAO, C. B., 73-1627, 4057
 RAO, C. N., 73-895
 RAO, C. N. R., 73-2582
 RAO, C. P., 73-4026
 RAO, G. V., 73-1018
 RAO, G. V. S. R., 73-4043
 RAO, G. V. U., 73-4314
 RAO, J. M., 73-892, 893
 RAO, J. S. R. K., 73-1432
 RAO, K. B., 73-663
 RAO, K. N., 73-893
 RAO, K. V. K., 73-4338
 RAO, M. K., 73-513
 RAO, M. N., 73-619
 RAO, N. R., 73-273
 RAO, P. K., 73-1433
 RAO, R. J., 73-785

- RAO, S. S., 73-4153
 RAO, T. R., 73-1627, 4339
 RAO, S. SUBBA, 73-1483
 RAPP, G., Jr., 73-4210
 RAPP, J. B., 73-1021
 RAPPARD, E., 73-3407
 RASHEED, A. Z., 73-3519
 RASMUSSEN, R. A., 73-2654
 RASMUSSEN, S. E., 73-1184
 RASMY, M., 73-3597
 RASNICK, F. D., 73-1395
 RASSOUL, A. A. A., 73-3912
 RASUL, G., 73-3642
 RATAJCZAK, T., 73-2083
 RAU, A., 73-978
 RAUCQ, P., 73-4261
 RAVINA, I., 73-128
 RAVINDRANATH, K., 73-249
 RAY, P. S., 73-3081
 RAY, V. L., 73-1726
 RAYEVSKAYA, M. B., 73-2973
 RAYNER, J. H., 73-3467
 RAZIEL, S., 73-2324
 RAZIN, L. V., 73-1944
 RAZUMOVA, R. V., 73-737
 RAZUMOVA, V. N., 73-2329
 REA, J. R., 73-2430, 2431, 2433
 READ, J. L., 73-58
 READ, W. A., 73-3110
 REAY, A., 73-4064
 RECCHI, G., 73-1405
 RECKER, K., 73-1499, 3998
 REDDY, I. K., 73-3229
 REDDY, K. R., 73-785
 REDDY, M. N., 73-896
 REDFERN, B. A. W., 73-3212
 REED, B. L., 73-1382
 REED, D. J., 73-2282
 REED, G. W., 73-3902
 REED, G. W., Jr., 73-3927, 3953
 REED, J. C., Jr., 73-4318
 REED, L. W., 73-129, 157
 REED, R. A., 73-2269
 REED, S. J. B., 73-1181, 2788, 3347
 REEDER, S. W., 73-1709
 REES, C. E., 73-3754
 REESMAN, A. L., 73-3405, 3409
 REESOR, J. E., 73-1033
 REEVES, C. C., Jr., 73-1487, 3430
 REEVES, H., 73-3258
 REEVES, M. J., 73-1698
 REFAAT, A. M., 73-3797
 REGE, S. M., 73-1046, 4340
 REGÊNCIO MACEDO, C. A., 73-1985
 REGNAUD, F., 73-3781
 REHRIG, W. A., 73-2487
 REHTIÄRVII, P., 73-2884
 REID, A. M., 73-1748, 3875, 3882, 3952
 REID, K. O., 73-2214
 REILLE, J.-L., 73-3114
 REIMER, T., 73-475
 REINSCH, D., 73-4334
 REISER, H. N., 73-285
 REJL, L., 73-2028
 REKHARSKIY, V. I., 73-1365, 2569
 REKHARSKAYA, V. M., 73-1365
 REMEIKKA, J. P., 73-3702
 RENAUD, M., 73-1277
 RENÉ, V., 73-1573
 RENNIE, I. A., 73-1262
 RENTON, J. J., 73-1255
 REVEL, J.-C., 73-1242
 REVERDATTO, V. V., 73-1008, 2311
 REX, D. C., 73-11, 12, 3034
 REX, R. W., 73-185, 1404, 2983, 2987
 REY, P., 73-589
 REYMENT, R. A., 73-4114
 REYNOLDS, P. H., 73-495
 REYNOLDS, R. C., 73-558
 REYNOLDS, R. C., Jr., 73-206, 4029
 RHODES, R. C., 73-4148
 RIBAR, B., 73-1332
 RIBBE, P. H., 73-116, 1613, 1847, 2362, 3471, 3473, 4068
 RICE, C. M., 73-2308
 RICE, S. J., 73-4373
 RICH, C. I., 73-40, 102, 116, 3384, 3385
 RICHARD, P., 73-1298, 2802
 RICHARDS, J. R., 73-1131, 1628, 2213, 3580
 RICHARDSON, M. F., 73-3923
 RICHARDSON, R. T., 73-1414
 RICHEY, J. E., 73-4181
 RICHTER, D. H., 73-2996
 RICHTER, P., 73-1058
 RICKARD, D. T., 73-381
 RIDDIOUGH, R. P., 73-2957, 3221, 4117
 RIDGE, J. D., 73-3577
 RIDING, A., 73-3228
 RIDLEY, W. I., 73-956, 1748, 3875, 3952
 RIECK, G. D., 73-1540
 RIEDER, R., 73-3929
 RIES, A. C., 73-4107
 RIFE, D. L., 73-2520
 RIGBY, D., 73-2308
 RIGGS, K. A., 73-2953
 RIJHS, H. R. P., 73-3537
 RILEY, D. L., 73-3899
 RILEY, J. P., 73-2697
 RILEY, L. B., 73-2299, 3784
 RINALDI, A., 73-1243
 RINALDI, R., 73-2838
 RINALDI, R. P., 73-2400
 RINEHART, J. S., 73-969
 RINGWOOD, A. E., 73-471, 611, 1527
 RITCHIE, J. C., 73-3825
 RITTMANN, A., 73-3084
 RITZMA, H. R., 73-2527
 RIVA DI SANSEVERINO, L., 73-656
 ROACH, R. A., 73-1057
 ROALDSET, E., 73-3427
 ROBB, W. A., 73-2919
 ROBBINS, J. C., 73-2308
 ROBERSON, H. E., 73-2382
 ROBERT, M., 73-1231, 1232
 ROBERT, R. V. D., 73-53, 2273
 ROBERTS, A. A., 73-2276
 ROBERTS, A. E., 73-301
 ROBERTS, D. E., 73-1952
 ROBERTS, D. G., 73-1045
 ROBERTS, J. L., 73-859, 3162
 ROBERTS, K., 73-2318
 ROBERTS, W. L., 73-3569, 3649
 ROBERTS, W. M. B., 73-3609
 ROBERTSON, J. J., 73-3684
 ROBERTSON, J. K., 73-1616
 ROBERTSON, R. H., 73-179
 ROBERTSON, R. H. S., 73-1234, 1266, 2863, 2867
 ROBERTSON, W. A., 73-2999, 4357
 ROBIE, R. A., 73-430, 1175, 1491, 3667, 3668
 ROBINS, B., 73-2020
 ROBINSON, B. W., 73-1886, 2481
 ROBINSON, D., 73-2848
 ROBINSON, G. D., 73-563
 ROBINSON, K., 73-2362
 ROBINSON, P. D., 73-1293, 1327, 1328
 ROBINSON, P. T., 73-1404, 3142
 ROCCI, G., 73-678
 ROCHESTER, N., 73-1094
 RODDICK, J. C., 73-2229, 2230
 RODGERS, K. A., 73-767, 2035, 4005
 RODRÍGUEZ, J., 73-1575
 ROEDDER, E., 73-480, 481, 1361, 1397, 1746, 3887, 3951
 ROEDER, P. L., 73-363
 ROEVER, W. P. DE, 73-1042
 ROGER, G., 73-3528
 ROGERS, J. J. W., 73-2008
 ROGGIANI, A. G., 73-4309
 ROGGWILLER, P., 73-3173
 ROHRBACHER, T. J., 73-1648
 ROKOP, D. J., 73-3919
 ROLAND, G. W., 73-1566, 2593
 ROMAN, R. J., 73-2457
 ROMANO, R., 73-3084
 ROMANOV, V. P., 73-2828, 3478
 ROMANOV, YU. A., 73-2975
 ROMANOVA, M. A., 73-2981
 ROMERO, A., 73-1490
 ROMIEZ, M., 73-3973
 RONA, P. A., 73-3756
 RONDOT, J., 73-2795
 ROOBOL, M. J., 73-819, 3061
 ROSE, E. R., 73-283, 570
 ROSE, H. J., Jr., 73-590, 600, 601, 1638
 ROSE, S. W., 73 1103
 ROSE-HANSEN, J., 73-1180
 ROSENBERG, J., 73-604
 ROSENBERG, P. E., 73-919, 2739
 ROSENQVIST, I. T., 73-1227
 ROSENTUR, L., 73-3286
 ROSHOLT, J. N., 73-1657, 3920
 ROSMAN, K. J. R., 73-576
 ROSNOWSKI, W., 73-2263
 ROSS, C. S., 73-4076
 ROSS, D. A., 73-2472
 ROSS, D. C., 73-2836, 3054
 ROSS, D. I., 73-3000, 4097
 ROSS, G. J., 73-113, 125, 3384, 3385
 ROSS, J. V., 73-3188
 ROSS, M., 73-4076
 ROSS, W. D., 73-3923
 ROSSER, H., 73-995
 ROSSI, G., 73-1291, 1296, 2369, 3466
 ROSSI, S. W., 73-124
 ROST, F., 73-2126, 2809
 ROST, R., 73-642, 1207
 ROTH, E., 73-3781
 ROTH, R. S., 73-96
 ROTH, W. L., 73-361
 ROTHE, P., 73-784
 ROTHENBERG, A. M., 73-3928
 ROTHSTEIN, A. T. V., 73-742, 1978
 ROUF, M. A., 73-3698
 ROURKE, F. M., 73-488
 ROUSE, R. C., 73-236, 2449, 2450
 ROUVIER, H., 73-260
 ROUX, J., 73-1611
 ROUX, J. P., 73-1338
 ROVENSKEYA, A. S., 73-2737
 ROWBOTHAM, G., 73-2373
 ROWE, J. J., 73-78, 1185, 1570
 ROWE, P. W., 73-1269
 ROWLAND, J. F., 73-4063
 ROWLAND, T. L., 73-296
 ROWLEY, P. D., 73-3124
 ROY, D. M., 73-362
 ROY, R., 73-366
 ROYLE, L. G., 73-1683, 2730
 ROZBIANSKAYA, A. A., 73-2569
 ROZHKOVO, I. S., 73-270
 ROZINOV, M. I., 73-266
 RUB, M. G., 73-2672
 RUBIN, M., 73-1465
 RUBINSTEIN, M., 73-3286
 RUCKER, J. B., 73-4299
 RUCKLIDGE, J., 73-2688
 RUDASHEVSKIĬ, N. S., 73-758, 763, 3150
 RUDDIMAN, W. F., 73-2011
 RUDEL, A., 73-3082
 RUDENKO, S. A., 73-1849
 RUDERT, V., 73-434
 RÜDLINGER, G., 73-2179
 RUDNITSKAYA, YE. S., 73-280, 2873
 RUDOWSKI, R., 73-594
 RUEZ, P. H., 73-397
 RUGE, H., 73-4346
 RUITENBERG, A. A., 73-3567
 RUMEAU, J.-L., 73-2072, 2087
 RUMES, A., 73-4237
 RUNCIMAN, W. A., 73-3453, 3454, 4031
 RUNNELLS, D. D., 73-1452, 1711
 RUOTSALA, A. P., 73-3538
 RUSSELL, B. G., 73-575, 3348
 RUSSELL, G. M., 73-1167
 RUSSELL, J. D., 73-140, 1225, 3431
 RUSSELL, R. D., 73-3293, 3295
 RUSSELL, R. T., 73-2530
 RUSSO, P., 73-96
 RUTHERFORD, G. K., 73-2335
 RUTHERFORD, M. J., 73-2613
 RUTISHAUSER, H., 73-4104
 RUZICKA, V., 73-277
 RYABCHIKOV, I. D., 73-1591
 RYAN, W. B., 73-2011
 RYBACH, L., 73-1955
 RYBAKOV, S. I., 73-1374
 RYDELL, H. S., 73-3785
 RYE, R. O., 73-550, 2670
 RYKL, D., 73-2610
 SAADALLAH, A. A., 73-1424
 SAADI, T. A. K., 73-1698
 SAALFELD, H., 73-2419, 3676
 SABATIER, G., 73-1611, 2385
 SABATIER, H., 73-2120
 SABINA, A. P., 73-1093
 SABINE, P. A., 73-1969
 SABOURAUD, C., 73-522
 SABU, D. D., 73-3974
 SACKETT, W. M., 73-2711
 SADANAGA, R., 73-3461
 SADASHIVAIAH, M. S., 73-103, 3041
 SADDIQUI CHOUDHRY, M., 73-4074
 SADRZADEH, M., 73-2926
 SAIED, EL T. M., 73-4111
 SAEMUNDSSON, K., 73-4205
 SAFDAR, M., 73-3398, 3399, 3611, 4074
 SAGAN, C., 73-1106
 SAGGERSON, E. P., 73-875, 4096
 SAGON, J.-P., 73-2102
 SAHA, A. K., 73-936, 1991
 SAHAMA, TH. G., 73-749, 750, 2884, 3031
 SAHASRABUDHE, P. W., 73-1076
 SAHOO, R. K., 73-743
 SAHU, K. C., 73-272, 3979, 4331
 SAIF, S. I., 73-3038
 SAINSBURY, C. L., 73-2308, 2521
 SAITO, K., 73-3694
 SAITTA, M., 73-2284
 SAKAI, H., 73-1645, 1663, 3801
 SAKAMOTO, M., 73-143
 SAKHARNOVA, I. L., 73-1873
 SAKHAROV, B. A., 73-3382
 SAKURAI, K., 73-732, 790
 SALÁT, J., 73-654
 SALEEB, G. S., 73-4032

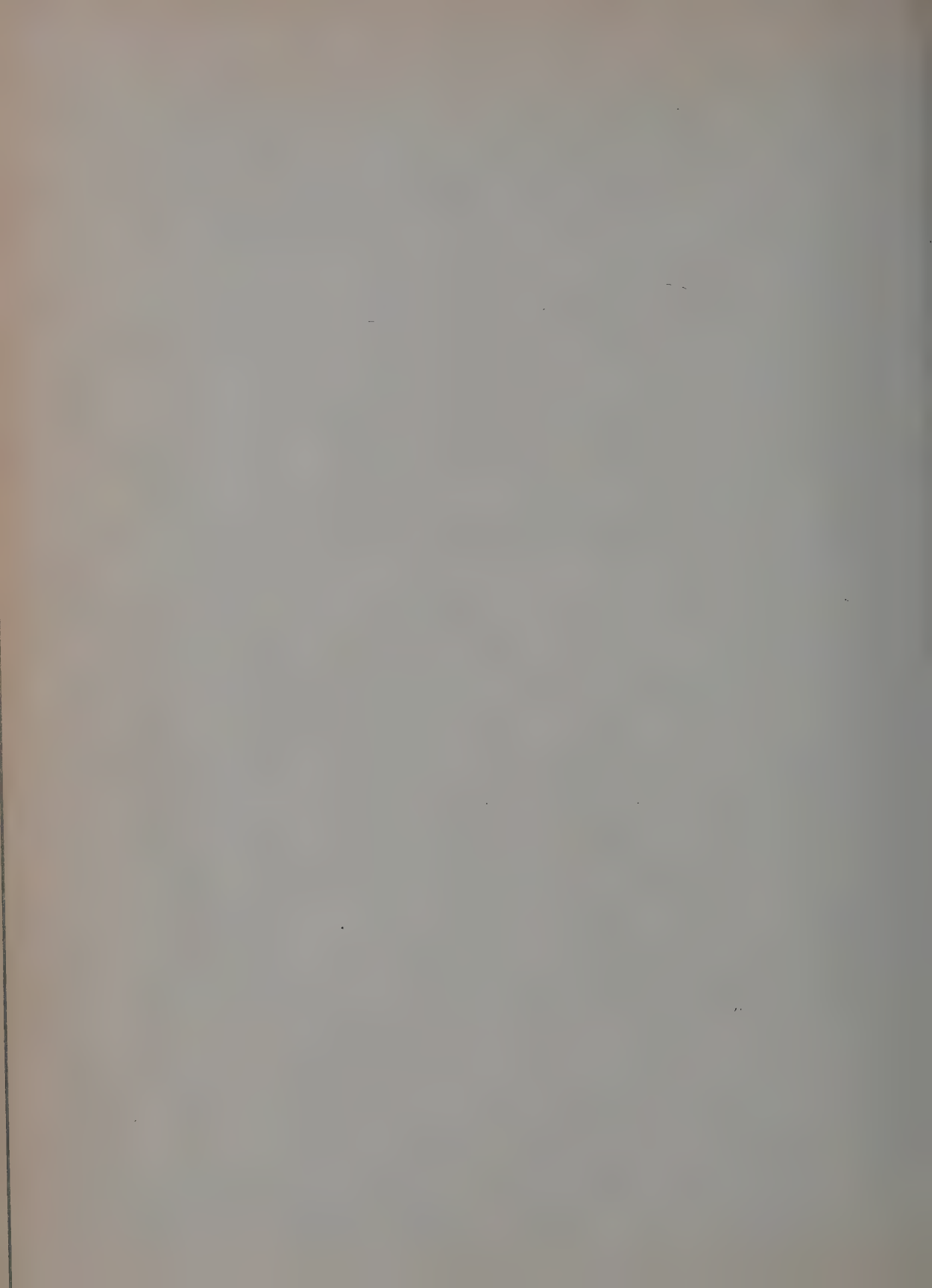
- LEEB-ROUFIAEL, G. S., 73-3599
 LIKHOF, V. S., 73-2474
 LISBURY, J. W., 73-1066
 LOTTI, C. A., 73-1368, 1864, 3541
 LVARDO CANELHAS, M. B., 73-2053
 MAD, A., 73-3827
 MAJOVÁ, E., 73-3372, 3985
 MAMA, J. C., 73-2299
 MOILOVICH, M. I., 73-1618
 MSONOVA, N. S., 73-4030
 MUELSSON, L., 73-3018
 NCHEZ, A. G., 73-3877
 NDBERG, P. A., 73-4224
 NDERS, J. E., 73-3849
 ANDERSON, D. J., 73-859
 NGSTER, D. F., 73-1347, 1383, 2234, 2663
 NIN, B. P., 73-1427
 NKARAN, A. V., 73-490, 1991
 NKAR DAS, M., 73-1165
 NSEVERINO, L. R. DI, 73-656
 NT, B. R., 73-1433
 NTOLIKUDD, P. M., 73-1764
 AS, J.-L., 73-902
 POUNTZIS, E., 73-1931
 RAVANAN, S., 73-2143
 RMA, S. R., 73-4156
 ROJINI, B., 73-1433
 RTORI, F., 73-238, 2414, 3465
 SAKI, A., 73-1629
 ŠEK, L., 73-1512
 SS, E., 73-2496
 SSANO, G. O., 73-3294
 SSANO, G. P., 73-2507, 2665, 3190
 SSI, F. P., 73-1826, 2837
 STIRI, C. S., 73-650
 STIRI, J. C. V., 73-897
 STIRI, V. V., 73-1730
 STRY, A. V. R., 73-940
 STRY, C. A., 73-54
 THE, R. V., 73-670, 4006
 TO, M., 73-1306, 3084
 TO, O., 73-191
 TO, T., 73-1440
 TYANARAYANA, P., 73-3542
 UCIER, A. E., 73-1850
 UER, H. I., 73-2753
 UNDERS, M. J., 73-2813
 UPÉ, F., 73-2299
 VIN, S. M., 73-439
 WHNEY, B. L., 73-117
 WIKINS, F. J., 73-1408, 1409
 KENA, S. K., 73-1613, 2552
 YLES, F. L., 73-2597
 YNISCH, H. J., 73-3712
 ARFE, C. M., 73-2572
 AVNIČAR, S., 73-3177
 SAL, J. S. C., 73-503
 HADLUN, T. N., 73-2299
 HAEFFER, O. A., 73-607
 HÄFER, A., 73-3116
 HAIRER, J. F., 73-2008, 3892
 HARBERT, H. G., 73-3285, 3984
 HARBERT, S., 73-2328
 HARM, B., 73-1930
 HATZ, J. F., 73-3211
 HAU, M. P., 73-1650
 HAUDY, R., 73-597
 HEERE, J., 73-4238
 HEITZ, B. E., 73-1580
 HEIDEGGER, K. F., 73-2389
 HEINER, B. J., 73-1647, 3782
 HIEBER, M., 73-323, 1499
 HIENER, E. J., 73-4138, 4235
 HIFFMANN, C. A., 73-2638
 HILLAT, B., 73-3265
 HINDLER, C., 73-3173
 SCHIPPERS, A. B. A., 73-3448
 SCHLEY, R., 73-3661
 SCHLIEPHAKE, R.-W., 73-36
 SCHMADEBECK, R., 73-605
 SCHMAKIN, B. M., 73-3149
 SCHMALBERGER, D. C., 73-3260
 SCHMALZ, R. F., 73-3829
 SCHMID, K., 73-3532
 SCHMIDT, D. L., 73-26
 SCHMIDT, E. E., 73-2357
 SCHMIDT, J., 73-674
 SCHMIDT, K., 73-2818
 SCHMIDT, R. G., 73-1378
 SCHMIDT-BLEEK, F., 73-2793
 SCHMINKE, H.-U., 73-3088
 SCHMITT, L. J., Jr., 73-851
 SCHMITT, R. A., 73-588, 589, 593, 3948
 SCHNEER, C. J., 73-1274
 SCHNEIDER, A., 73-1837
 SCHNEIDER, H., 73-1776
 SCHNEIDER, H.-J., 73-3534
 SCHNEIDER, J., 73-3850
 SCHNEIDER, S. J., Jr., 73-96
 SCHNEIDERMAN, N., 73-4224
 SCHNETZLER, C. C., 73-599, 1671, 1774, 3918
 SCHNITZER, M., 73-532, 3391
 SCHOELL, M., 73-3524
 SCHOEN, R., 73-550
 SCHOENFELD, I., 73-79
 SCHOEPE, R., 73-1499
 SCHOFF, S. L., 73-1724
 SCHOLZ, H., 73-4262
 SCHOLZ, R. W., 73-4239
 SCHONFELD, E., 73-3884, 3930
 SCHOPE, J. M., 73-3107
 SCHOT, E. H., 73-4059
 SCHOTT, J., 73-1174, 2655, 3508
 SCHREYER, W., 73-412, 4303
 SCHRIJVER, K., 73-4316
 SCHRÖCKE, H., 73-307, 359, 3665
 SCHRÖDER, N. F., 73-2017
 SCHUBERT, C. E., 73-2681
 SCHUBNEL, H.-J., 73-1937
 SCHULTZ, L. G., 73-188
 SCHULTZ, R., 73-1501
 SCHULZ, H., 73-1309, 1310, 1311, 3753
 SCHULZ, O., 73-1416
 SCHUMANN, H. H., 73-1702
 SCHÜRMANN, K., 73-2764
 SCHWAB, K., 73-923
 SCHWANDER, H., 73-1841, 1848, 4072
 SCHWARCZ, H. P., 73-3769
 SCHWARTZ, D. P., 73-2008
 SCHWARTZ, E. J., 73-1078
 SCHWARTZ, W., 73-476
 SCHWARTZKOPF, J., 73-4365
 SCHWARZ, E. J., 73-2890, 4356
 SCHWARZBACH, M., 73-3291, 4205
 SCHWERDTFEGER, C. F., 73-3476
 SCHWERTDNER, W. M., 73-3195, 3216
 SCHWERTMANN, U., 73-146, 375
 SCOON, J. H., 73-585
 SCORDARI, F., 73-2422
 SCOTT, D. H., 73-2786, 2787
 SCOTT, E., 73-2082
 SCOTT, E. R. D., 73-1760
 SCOTT, M. R., 73-3756
 SCOTT, R. B., 73-2046, 3756
 SCOTT, S. D., 73-1554, 1555, 3558
 SEABORNE, M. A., 73-350
 SEARLE, D. L., 73-1372
 SEARLE, E. J., 73-2062
 SECK, H. A., 73-1825
 SECLAMAN, M., 73-718
 SEDOVA, I. S., 73-2852
 SEED, D. P., 73-3418
 SEELEY, J. B., 73-2062
 SEELIGER, E., 73-1941
 SEGNI, E. R., 73-428, 1612, 2618, 2620
 SEGUIN, M. K., 73-3219
 SEHNSTICKER, R. G., 73-1566
 SEIDERS, V. M., 73-2067
 SEIFULLIN, R. S., 73-1064
 SEILER, P., 73-3449
 SEITZ, M., 73-3925
 SEKERKA, R. F., 73-1506
 SEL'DISHEVA, YE. B., 73-3067
 SELF, S., 73-3084
 SELMER-OLSEN, A. R., 73-3329
 SELO, M., 73-3281, 3290
 SEMENENKO, N. P., 73-3510
 SEMENOV, G. S., 73-2689
 SEMENOV, I. V., 73-2827
 SEMILETOV, S. A., 73-329
 SEN, R., 73-1411, 4323
 SEN, S. K., 73-3185
 SEN, S. N., 73-895
 SENATSKAYA, G. S., 73-2159
 SENDLEIN, L. V. A., 73-1693
 SENFTLE, F. E., 73-1186, 3354, 3950
 SENGUPTA, D., 73-3453, 3459
 SEN GUPTA, J. G., 73-2270
 SERGEEV, A. S., 73-489
 SERRANO, L., 73-2325, 2326
 SERRATOSA, J. M., 73-164
 SERVANT, J., 73-553
 SESTINI, G., 73-2299
 SETHNA, S. F., 73-4195
 SEVER, C. K., 73-2151
 SEWARD, T. M., 73-3666
 SHABANIN, M. A., 73-1865
 SHABANINA, N. V., 73-1865
 SHACKLETON, R. M., 73-3157, 4107
 SHACKLETON, W. G., 73-3612
 SHACKLETTE, H. T., 73-2753
 SHADMON, A., 73-3365
 SHAH, K. R., 73-76
 SHAHEED, S. M., 73-156
 SHAHID, K. A., 73-229
 SHAINBERG, I., 73-119
 SHAMS, F. A., 73-4116, 4150
 SHANIN, L. L., 73-3276
 SHANNON, F. G., 73-3568
 SHANNON, J., 73-2370
 SHANNON, R. D., 73-3481
 SHAPIRO, L., 73-1160
 SHAPKINA, YU. S., 73-2852
 SHARAPOV, V. N., 73-1008, 1017
 SHARKEY, A. G., Jr., 73-2703
 SHARMA, S. R., 73-891
 SHARMA, T., 73-528, 3848
 SHARP, J. H., 73-106
 SHARP, W. E., 73-4201
 SHARP, W. N., 73-662, 2912
 SHASHKIN, D. P., 73-237, 3699
 SHATAGIN, N. N., 73-1429
 SHBAU, B. M., 73-2920
 SHAW, D. M., 73-2648, 2720
 SHAW, H. F., 73-1215, 3431
 SHAW, V. E., 73-52, 2668
 SHAZLY, E. M. EL, 73-3596, 4032, 4190
 SHCHEKA, S. A., 73-2018
 SHCHERBACK, N. P., 73-3287
 SHEA, J. H., 73-2244
 SHEAD, A. C., 73-2183
 SHEARMAN, D. J., 73-776
 SHEFAL, N. N., 73-1279
 SHEGELSKI, R. J., 73-3822
 SHEIKH, M. R., 73-3832
 SHEIKH, Q., 73-3687
 SHELLEY, D., 73-4027
 SHEPARD, A. O., 73-188
 SHEPELEV, YU. F., 73-2367
 SHEPHERD, J., 73-4182
 SHEPPARD, R. A., 73-810
 SHEPPARD, R. M., 73-2164
 SHEPPARD, S. M. F., 73-1649
 SHERWOOD, J. N., 73-1277
 SHEVYAKOV, A. M., 73-407
 SHIBATA, Y., 73-697
 SHIBUYA, G., 73-1843
 SHIDO, F., 73-2194, 3986
 SHIER, D. E., 73-2246
 SHIMA, M., 73-626
 SHIMADA, I., 73-799
 SHIMADA, M., 73-1614
 SHIMADA, N., 73-768
 SHIMAZAKI, H., 73-1561
 SHIMAZU, M., 73-1992
 SHIMEK, R., 73-918
 SHIMODA, S., 73-99, 177, 191
 SHIMOKAWA, T., 73-1672
 SHIMOYAMA, A., 73-164
 SHIMOZURU, D., 73-963
 SHIMP, N. F., 73-3820, 4281
 SHINN, E. A., 73-4295
 SHINNO, I., 73-223
 SHIRAI, T., 73-348, 349
 SHIROKOVA, I. YA., 73-2736
 SHIROKUSHKIN, V. D., 73-2476
 SHIROZU, H., 73-1089
 SHISHKIN, N. N., 73-758
 SHKODZINSKIY, V. S., 73-3180
 SHLAIN, L. B., 73-1546
 SHMAKIN, B. M., 73-3149
 SHMULOVICH, K. I., 73-1588
 SHNIP, O. A., 73-3179
 SHOEMAKER, C. B., 73-2353
 SHOEMAKER, D. P., 73-2353
 SHRBNY, O., 73-1788
 SHRUBOVITCH, F. V., 73-2498
 SHTERNBERG, A. A., 73-1597
 SHUGAROVA, N. A., 73-518
 SHUGUROVA, N. A., 73-1773, 3181
 SHULTZ, C. H., 73-2684, 3103
 SHUMKOVA, N. G., 73-2938
 SHUNKOVA, N. G., 73-1936
 SHURUBOR, YU. V., 73-2691
 SIAL, A. N., 73-3806
 SIDDIQUI, F. A., 73-3640
 SIDERIS, C., 73-4010
 SIDES, G., 73-1271
 SIDORENKO, A. V., 73-2701
 SIDORENKO, SV. A., 73-2701
 SIDOROV, A. A., 73-1376
 SIDOROV, A. F., 73-758, 760
 SIEGEL, F. R., 73-778, 781
 SIEGEL, S., 73-2411
 SIEGL, W., 73-254
 SIEMES, H., 73-1519, 3712
 SIERRA, J., 73-1415
 SIEVERS, R. E., 73-3923
 SIGHINOLFI, G. P., 73-2822, 3757
 SIGURD, D., 73-3660
 SIGURDSSON, H., 73-2068
 SIKORA, W., 73-3401
 SILBERMAN, M. L., 73-3297, 3298
 SILLITOE, R. H., 73-242, 763, 1408, 1409, 2454
 SILLS, I. D., 73-130
 SILVER, E., 73-2170
 SILVER, L. T., 73-920, 3080
 SILVER, M. L., 73-4349
 SILVERTHORNE, D. F., 73-1163
 SIMANOVICH, I. M., 73-2862
 SIMKIN, T., 73-1782
 SIMMONS, G., 73-2157, 3211
 SIMMONS, G. C., 73-4125
 SIMMONS, W. B., Jr., 73-801, 2393
 SIMON, B., 73-2874
 SIMON, D. E., 73-1693

- SIMON, E., 73-2809
 SIMON, F., 73-1638
 SIMON, F. O., 73-78
 SIMONEIT, B. R., 73-1752, 3816, 3945
 SIMONOV, M. A., 73-237, 2428
 SIMONY, P. S., 73-3165
 SIMPSON, A. J., 73-2308
 SIMPSON, D. R., 73-4128
 SIMPSON, P. R., 73-2308, 4347
 SIMS, J. D., 73-1000
 SIMS, P. K., 73-2104
 SINCLAIR, A. J., 73-495
 SINCLAIR, J. E., 73-232
 SINCLAIR, W. D., 73-2508
 SINDHU, P. S., 73-136
 SINDING-LARSEN, R., 73-2308
 SINGER, D. A., 73-245
 SINGH, K. K., 73-2502
 SINGH, R., 73-3395
 SINGH, S., 73-1406
 SINGH, S. K., 73-226, 1009
 SINGHAL, J. P., 73-3395
 SINGRU, R. M., 73-2582
 SINHA, M. N., 73-3213
 SINHA, R. N., 73-1730
 SINIANSKY, W. I., 73-2619
 SINITSYN, A. V., 73-887
 SIPPEL, R. F., 73-4222
 SITES, R. S., 73-527
 SIVARAMAKRISHNAN, V., 73-650
 SJOGREN, W., 73-2780
 SKELHORN, R. R., 73-3084, 3228
 SKEMPTON, A. W., 73-1270
 SKEVINGTON, D., 73-2967
 SKINNER, B. J., 73-1569, 3705
 SKINNER, P., 73-1472
 SKIPPEN, G. B., 73-2575
 SKOČEK, V., 73-1424
 SKORSKI, R., 73-3697
 SKOVORODKIN, N. V., 73-1150
 SKRIPCHENKO, N. S., 73-1353, 2894
 SKVARA, F., 73-3310
 SLABAUGH, W. H., 73-171
 SLACK, J. F., 73-527
 SLATER, D., 73-3506
 SLATER, R. A., 73-1281
 SLATT, R. M., 73-4267, 4271
 SLAWSON, W. F., 73-3293, 3295
 SLEIGHT, A. W., 73-2421
 SLOAN, T., 73-3228
 SLOANE, R. L., 73-209
 SLOBODSKOY, R. M., 73-1008
 SMALLEY, I. J., 73-1228, 4221
 SMEDS, H. W., 73-3097
 SMEJKAL, V., 73-1629
 SMEJKAL, V., 73-1691
 SMIRNOVA, T. A., 73-1779
 SMITH, A. R., 73-4169
 SMITH, DOUGLAS, 73-1594
 SMITH, D. B., 73-978
 SMITH, D. C. W., 73-1977, 3458
 SMITH, D. I., 73-2116
 SMITH, D. R., 73-4216
 SMITH, D. T., 73-3234
 SMITH, E. C., 73-2308
 SMITH, E. L., 73-3877
 SMITH, F. G., 73-2653
 SMITH, F. W., 73-4359
 SMITH, G. F. HERBERT, 73-1208
 SMITH, H. W., 73-3095
 SMITH, I. E., 73-817
 SMITH, J. G., 73-3050
 SMITH, J. V., 73-581, 1743, 1782, 1795, 2365, 2396, 2397, 2756, 3033, 3871, 3890, 3895, 3931
 SMITH, J. W., 73-1445, 2919
 SMITH, L., 73-2299
 SMITH, M., 73-4234
 SMITH, P. J., 73-3228
 SMITH, R. E., 73-1007, 2242
 SMITH, R. W., 73-1551
 SMITH, S. V., 73-3305
 SMITH, T. K., 73-67
 SMITH, W. L., 73-2405
 SMITHERINGALE, W. G., 73-3078, 3193
 SMITHSON, S. B., 73-3203
 SMOLARSKA, I., 73-3536
 SMOLIN, YU. I., 73-2367
 SMOL'YANINOVA, N. N., 73-2873
 SMOTHERS, W. J., 73-364
 SMULIKOWSKI, K., 73-1036
 SMULIKOWSKI, W., 73-4106
 SMYKATZ-KLOSS, W., 73-723
 SMYTH, J. R., 73-1158
 SNELGROVE, A. K., 73-3538
 SNELLING, N. J., 73-1117, 2206
 SNETSINGER, K. G., 73-809, 4040
 SNIDER, D. W., 73-698
 SNYDER, F. G., 73-3576
 SNYDER, S. M., 73-1031
 SOARES DE ANDRADE, A. A., 73-1985
 SOBOLEV, N. V., 73-814, 2311, 3068, 3983
 SOBOLEV, S. F., 73-2736
 SOBOLEV, V. S., 73-2311
 SOBOLEVA, S. V., 73-1882, 2376, 2383
 SOFOULIS, J., 73-991
 SOKOLOV, A. P., 73-2308
 SOKOLOV, V. A., 73-2308
 SOKOLOVA, G. V., 73-2381
 SOLIMAN, M. R., 73-403
 SOLIMAN, S. M., 73-4253
 SOLOMINA, I. A., 73-2159
 SOLOMON, D. H., 73-120, 138
 SOLOMON, M., 73-3764
 SOMAYAJULU, P. V., 73-896
 SOMERVILLE, P. G., 73-3232
 SOMMERAUER, J., 73-746
 SONDAG, F., 73-3810
 SONET, J., 73-1118
 SOOD, M. K., 73-3734
 SOPER, N. J., 73-1952, 2196
 SOPTRAJANOVA, G., 73-3283
 SØRENSEN, P., 73-1188
 SOROHU, M., 73-3355
 SOUBIAS, D., 73-2494
 SOUČEK, J., 73-928
 SOURISSE, C., 73-2072
 SOUSA, M. B., 73-1985
 SOUTHWICK, D. L., 73-4344
 SPADEA, P., 73-4209
 SPASSKIĭ, B. S., 73-793
 SPASSOVA, S., 73-3303
 SPEARS, D. A., 73-198, 523, 1236, 1359, 2710, 3237
 SPEEDYMAN, D. L., 73-2019
 SPEIDEL, D. H., 73-1534
 SPENCER, D. R. F., 73-3625
 SPENCER, M. O., 73-1206
 SPENCER, W. G., 73-745
 SPERLING, H., 73-3630, 3772
 SPETTEL, B., 73-3929
 SPOONER, C. M., 73-1140, 3758
 SPOONER, E. T. C., 73-4004
 SPRINGER, G., 73-2588
 SPRINGER, J. S., 73-284
 SPRINGER, T., 73-1277
 SPRY, A. H., 73-436, 947
 SQUYRES, J. B., 73-2491
 SRBEK, F., 73-1516
 SREBRODOL'SKIĭ, B. I., 73-782, 1700
 SREENIVAS, B. L., 73-986
 SRIDHAR, K., 73-2316
 SRINIVASAN, B., 73-3270
 SRINIVASAN, R., 73-986, 1437
 SRIVASTAVA, O. N., 73-1288
 STAATZ, M. H., 73-2535, 2668
 STACEY, F. D., 73-1623
 STACEY, J. S., 73-1143, 2261
 STAHL, W. E., 73-3843
 STAHNKE, C., 73-2076
 STALDER, H. A., 73-3284, 3366, 4072, 4364, 4365
 STANIĆ, E., 73-647
 STANTON, R. E., 73-3333, 3334
 STANTON, R. L., 73-2564, 3093, 3367, 3692
 STANZIONE, D., 73-4207
 STAPLES, L. W., 73-4079
 STARINSKY, A., 73-2344
 STARKEY, H. C., 73-137, 188
 STARKOV, G. M., 73-2018
 STARKOV, G. N., 73-683
 STARMER, I. C., 73-1044, 2112
 STARODUBCEVA, R. V., 73-1621
 STAROSTIN, V. I., 73-1425
 STEACY, H. R., 73-507
 STEEL, G., 73-2709
 STEELE, I. M., 73-581, 2756, 3871, 3931
 STEIDL, P. F., 73-3719
 STEIGMANN, G. A., 73-1754, 2783
 STEINBERGER, I. T., 73-1283, 1284, 1286, 1287
 STEINBORN, T. L., 73-598
 STEINER, J., 73-1995
 STEINFINK, H., 73-2423
 STEINHAUSER, N., 73-1239
 STEINNES, E., 73-509, 2297, 3916
 ŠTELČL, J., 73-674
 ŠTEMPOK, M., 73-1417, 1982
 STENSROD, H. L., 73-3994, 4007
 STEPANETS, M. I., 73-2559
 STEPANOV, V. I., 73-1936
 STEPASHKINA, V. M., 73-1721
 STEPHANSSON, O., 73-2260
 STEPHENS, J. D., 73-4035
 STEPHENSON, A., 73-1899
 STEPHENSON, D., 73-671
 STEPHENSON, J. F., 73-1385
 STEPHENSON, N. C. N., 73-3042
 STEPIEN, D., 73-4242
 STERN, T. W., 73-2236
 STERN, W. B., 73-68
 STEVEN, T. A., 73-1658
 STEVENS, C. M., 73-3919
 STEVENS, R. D., 73-28, 1637
 STEVENSON, B. G., 73-1910
 STEVENSON, I. P., 73-1973
 STEVENSON, J. S., 73-2932
 STEVENSON, L. S., 73-2932
 STEVESON, B. G., 73-562, 2742
 STEVESON, E. A., 73-562
 STEWART, G. A., 73-221
 STEWART, J. M., 73-1278, 3486, 3554, 3555, 4063
 STICKNEY, W. A., 73-1542
 STIEGLER, J., 73-1258
 STILLMAN, C. J., 73-4139
 STINCHFIELD, L., 73-1084, 3264
 STINCHFIELD, R., 73-1084, 3264
 STIPP, J. J., 73-1133
 STOBBS, W. M., 73-3452
 STOCH, L., 73-2263, 2314, 3401
 STOCKWELL, C. H., 73-2225
 STOIBER, R. E., 73-2506
 STOITSEVA, R., 73-3595
 STOKLOSA, A., 73-2263
 STOLARCZYK, F., 73-979
 STOLLERY, G., 73-1742
 STOLYAROV, YU. M., 73-265
 STOLYAROVA, T. I., 73-1929, 2930
 STORPEL, D., 73-382
 STOPTRAJANOVA, G., 73-3746
 STORRE, B., 73-1601, 1602
 STORRY, P. G., 73-2021
 STOWE, C. W., 73-944
 STRANGWAY, D. W., 73-2169
 STRASSER-KING, V. H., 73-1811
 STRENS, R. G. J., 73-211
 STRID, A., 73-958
 STRINGFIELD, V. T., 73-1389
 STRINGHAM, B., 73-2510
 STRONG, D. F., 73-885, 1999
 STRÜBEL, G., 73-382
 STUBICAN, V. S., 73-1537
 STUCKLESS, J. S., 73-2236
 STUMM, W., 73-2071
 STUMPF, E. F., 73-1151, 293880
 STURIALE, C., 73-3084
 STURT, B. A., 73-1950, 214133
 SUBBA RAO, S., 73-1483
 SUBBARAO, K. V., 73-1674, 2853
 SUBLETT, A. G., 73-3203
 SUBRAHMANYA, K. R., 73-937
 SUBRAHMANYAM, K., 73-892
 SUBRAHMANYAM, N. P., 73-431
 SUBRAMANIAM, V. S. V., 73-19
 SUBRAMANYAN, V., 73-2504
 SUCHOW, L., 73-3454
 SUDARSANAN, K., 73-2427, 243503, 3504
 SUDO, T., 73-107
 SUENO, S., 73-1300, 1301, 2772
 SUENO, T., 73-94
 SUGANOV, B. I., 73-1354
 SUGII, K., 73-1544
 SUGISAKI, R., 73-510, 4176
 SUGITANI, Y., 73-240
 SUHR, N. H., 73-44, 546
 SUITO, E., 73-174
 SUK, M., 73-474, 1050, 2130
 SUKHAREV, G. M., 73-1426
 SUKHESWALA, R. N., 73-4152, 4195
 SULERZHITSKIY, L. D., 73-1126
 SULLIVAN, J. S., 73-1466
 SULTANOV, A. D., 73-2735
 SUMMERHAYES, C. P., 73-1926
 SUMMERS, C., 73-3065
 SUMMERSON, C. H., 73-3140
 SUMSION, R. S., 73-3057
 SUNAGAWA, I., 73-1500, 151577
 SUNDVOLL, B., 73-509
 SUPERCHI, M., 73-260
 SUPKO, P. R., 73-2008
 SURDAM, R. C., 73-731, 144280
 SURI, S. K., 73-334
 SÜSSE, P., 73-1325, 3497
 SUTHERLAND, F. L., 73-3048, 303094
 SUTHERLAND, J. K., 73-1556
 SUTTER, J. F., 73-607
 SUTTLE, A. D., 73-2711
 SUTTON, J., 73-3157, 4098
 SUTTON, J. S., 73-2113, 3192
 SUVUROV, S. A., 73-368
 SUZUKI, T., 73-1885
 SVINITSKICH, V. G., 73-3748
 SVIRIDOV, D. T., 73-1289
 SVRIDOV, V. V., 73-2687
 SVIRIDOVA, R. K., 73-1289
 SVYAZHIN, N. V., 73-1922
 SWANSON, V. E., 73-543, 253811
 SWETT, K., 73-4230
 SWIDZINSKI, H., 73-551
 SWITZER, G. S., 73-2805
 SYCHUGOV, V. S., 73-1064
 SYED, A. A., 73-3309

- YERS, J. K., 73-145, 185, 2315, 2316
 YMES, R. F., 73-2944
 YMONS, D. T. A., 73-1078, 1079
 YROMYAMNIKOV, F. V., 73-1590
 YROMYATNIKOV, F. V., 73-1528
 ZABO, B. J., 73-29
 ZALKOWICZ, M., 73-2263
 ZELAGOWSKA-SKRZYPCZAK, E., 73-3632
 ZILÁGYI, M., 73-1704
 ZIPILA, K., 73-660
 ABATA, H., 73-1535
 ABOR, D., 73-1063
 ABORSZKY, F., 73-2301
 ABORSZKY, F. K., 73-1927
 ACKETT, S. L., 73-81
 ADDEUCCI, A., 73-4250
 AHIRKHELI, R. A. K., 73-3539, 2978, 2979, 3125
 AIT, E. A., 73-4114
 AKADA, T., 73-387
 AKAGI, H., 73-3743
 AKAHASHI, H., 73-446, 447
 AKAHASHI, K., 73-59
 AKANO, Y., 73-213, 214
 AKASHIMA, Y., 73-212
 AKAYANAGI, K., 73-1499
 AKEDA, H., 73-1812, 3882, 3884
 AKESHI, H., 73-1229
 AKÉUCHI, Y., 73-1209, 1210, 1303, 3461
 AKU, R. K., 73-2810
 AKUBO, H., 73-1619
 ALAPATRA, A. K., 73-490, 1439
 ALBOT, C. J., 73-3157
 ALMADGE, D., 73-3330
 AMAI, Y., 73-369
 AMBURNINI, D., 73-2299, 3533
 AMHANE, A. S., 73-629, 637
 AN, F. C., 73-44
 AN, L. P., 73-1741
 ANAKA, K., 73-726
 ANAKA, T., 73-510, 3965
 ANAKA, T., 73-2905
 ANELLI, G., 73-3213
 ANGUY, J. C., 73-3084
 ANK, R. W., 73-1259, 3368
 ANNER, P. W. G., 73-1421, 1422
 ARANUKHA, YU. K., 73-1426
 ARLAKOV, YU. P., 73-407
 ARNEY, J., 73-3730
 ARTE, P., 73-3987
 ASCH, P., 73-779
 ASKER, M. P., 73-2258
 ATRISHVILI, N. F., 73-3183
 ATSIENKO, P. A., 73-3478
 ATSUKA, K., 73-3709
 ATSUMOTO, M., 73-2740, 3897, 3920, 3946
 AUBER, E., 73-2540, 3646
 AUDEL, L., 73-3452
 AUSEN, L. V., 73-1427, 2308
 AYLOR, C. M., 73-1884, 1887
 AYLOR, D. M., 73-2280
 AYLOR, F. C., 73-2233
 AYLOR, F. M., 73-4236
 AYLOR, G. F., 73-903
 AYLOR, G. J., 73-3947
 AYLOR, H. F. W., 73-229, 2375
 AYLOR, H. P., 73-1649, 1676, 2716, 3909, 3954
 AYLOR, J., 73-1950
 AYLOR, J. C., 73-3208
 AYLOR, L. A., 73-2590, 2892
 AYLOR, R. G., 73-562, 1444, 1910, 2505, 2742
 AYLOR, R. K., 73-2079, 3237
 AYLOR, R. M., 73-146, 375
 TAYLOR, S. R., 73-594, 1994, 3796
 TAZIEFF, H., 73-1479, 3084, 4191
 TCHEICHVILI, L., 73-1539
 TCHOUBAR, C., 73-1307
 TCHOUBAR, D., 73-3452
 TELANDER, K. M., 73-3874
 TELEKI, P. G., 73-2248
 TEMPLEMAN-KLUIT, D. J., 73-1636, 2482
 TEMPLETON, D. H., 73-2444
 TENNAKON, D. T. B., 73-2161
 TEPIKIN, V. E., 73-1304
 TEREKHOVICH, S. L., 73-1639, 3783
 TERENO, J., 73-1987
 TERRAZAS, R., 73-2261
 TERTIAN, R., 73-2281, 3351
 TER VRUGT, J. W., 73-1582
 TESCHKE, F., 73-3929
 TETERIN, I. V., 73-2691
 TETTENHORST, R., 73-154, 2382
 THAYER, T. P., 73-246, 813
 THENG, B. K. G., 73-166, 169
 THEODORE, T. G., 73-1464
 THEUNISSEN, K., 73-2808
 THOAI, N. V., 73-1277
 THOMAS, C. H., 73-2965
 THOMAS, G., 73-3474
 THOMAS, H. H., 73-1671
 THOMAS, I. A., 73-3626
 THOMAS, J., Jr., 73-3652
 THOMAS, J. M., 73-2162
 THOMAS, R. L., 73-1680, 1681, 2695, 3819, 4272
 THOMAS, T. M., 73-1371
 THOMAS, W. W., 73-2283
 THOMPSON, A. B., 73-2617, 2623, 3669
 THOMPSON, B. A., 73-72
 THOMPSON, B. N., 73-1133, 1449
 THOMPSON, G., 73-1684
 THOMPSON, M. S., 73-4102
 THOMPSON, R. M., 73-2947
 THOMPSON, R. N., 73-857, 1524, 1525, 2013
 THOMSON, A. P., 73-1214
 THOMSEN, R. W., 73-686, 4078
 THOOR, T. J. W. VAN, 73-1211, 2312
 THOREZ, J., 73-193, 1238, 3435
 THORNER, M. R., 73-2889
 THORNTON, C. P., 73-2003
 THORPE, A. N., 73-3950
 THORPE, R. I., 73-279
 THORPE, R. S., 73-1974, 4100
 THRAILKILL, J., 73-4292, 4293
 THROOP, A. H., 73-2513
 THURBER, H. K., 73-2490
 THURSTON, D. R., 73-2084
 TIDY, E., 73-3932
 TIEN, P.-L., 73-38, 1096
 TIFFIN, D. L., 73-3004
 TILAK, V. V. S. S., 73-479
 TILL, R., 73-3308
 TILLEY, C. E., 73-1524, 1525
 TIMOFEYEVSKIY, D. A., 73-1894
 TIMOSHENKO, N. A., 73-3121
 TIMPERLEY, M. H., 73-3867
 TING, F. T. C., 73-999
 TIPPER, J. C., 73-4232
 TISCHENDORF, G., 73-2466
 TISCHER, P., 73-2257
 TISDALL, F. S. H., 73-462
 TISHCHENKO, V. A., 73-2473
 TITARENKO, A. D., 73-2158
 TITLEY, S. R., 73-2456
 TITOV, A. P., 73-2367
 TITTMAN, B. R., 73-4351
 TITULAER, C., 73-3872
 TOBSCHALL, H. J., 73-2841
 TOCCO, S., 73-2299, 3533
 TODD, G., 73-2258
 TODD, T. W., 73-3105, 3840, 4290
 TODT, W., 73-1120
 TOENS, P. D., 73-263
 TOKONAMI, M., 73-225, 235, 1329, 1330
 TOLBERT, G. E., 73-1470
 TOLLON, F., 73-2655, 2846, 3508
 TOLSTIKHIN, I. N., 73-1733
 TOMASSON, J., 73-1005
 TOMBLIN, J. F., 73-2068
 TOMBS, G. A., 73-466
 TOMITA, K., 73-107, 421
 TONANI, F., 73-2308
 TONGIORGI, M., 73-978
 TOOMS, J. S., 73-247, 2308
 TOOTS, H., 73-1913
 TORRE DE ASSUNÇÃO, C. F., 73-2053, 2136
 TOSCHEV, S., 73-316
 TOSSELL, J. A., 73-2557, 3345
 TOU, J. C.-M., 73-3216
 TOUDIC, Y., 73-1564
 TOULMIN, M. S., 73-1633
 TOURAY, J.-C., 73-522, 1869
 TOURENO, J., 73-975
 TOURTELLOT, H. A., 73-2299
 TOWE, K. M., 73-1004
 TOWNSEND, F. C., 73-157
 TRAILL, R. J., 73-1092, 3888
 TRASK, N. J., 73-1758
 TRAUTH, N., 73-2340
 TRAVESI, A., 73-3903
 TRAVIS, G. A., 73-276
 TRDLÍČKA, Z., 73-762, 1086
 TREGAUS, J. E., 73-3162
 TREMAINE, J. W., 73-1470
 TREMLETT, W. E., 73-1661
 TRENDALL, A. F., 73-989, 1128
 TRETIN, H. P., 73-3129
 TREVENA, I. C., 73-3491
 TREWIN, N. H., 73-1237
 TRIAT, J.-M., 73-2340
 TRICHÉ, C., 73-3998
 TRIPLEHORN, D. M., 73-3406
 TROCHIM, H. D., 73-2301
 TROFIMOV, N. A., 73-269
 TROITSKIY, S. L., 73-1126
 TROLL, G., 73-1599
 TROMBKA, J., 73-605
 TROMMSDORFF, V., 73-1522, 2127
 TRONEVA, N. V., 73-1942, 4082
 TROTTER, P. J., 73-1317
 TROUP, A. G., 73-2308
 TROUP, G. J., 73-221, 2436, 2819
 TRUBACHEV, A. I., 73-2474
 TRUEB, L. F., 73-2627
 TRUEMAN, N. A., 73-2530
 TRUHLÁŘOVÁ, M., 73-1514, 1515
 TRUMM, A., 73-3665
 TRÜMPY, R., 73-978
 TRZCIENSKI, W. E., Jr., 73-3893
 TSANG, T., 73-220, 3457
 TSAY, F.-D., 73-2784
 TSCHAEPEK, M., 73-685, 3374
 TSCHERNJAWSKI, W. L., 73-3670
 TSCHERRY, V., 73-1309, 1310, 1311, 3753
 TSEDEN, Ts., 73-2499
 TSEPIN, A. I., 73-1942, 4082
 TSINOBER, L. I., 73-1618
 TSINTSADZE, G. V., 73-264
 TSOGOYEV, V. B., 73-1426
 TSOUCARIS, G., 73-2446
 TSUNASHIMA, A., 73-162
 TSUSUE, A., 73-1441, 3759
 TUCHEK, E. T., 73-851
 TUCKER, D. H., 73-3046
 TUFAR, W., 73-253, 3593
 TUGARINOV, A. I., 73-3274
 TUGOVİK, G. I., 73-1428
 TUPPER, W. M., 73-2308
 TURAN, J., 73-4067
 TURCHENKO, S. I., 73-1827
 TURCO, G., 73-1785, 1787, 2874
 TUREKIAN, K. K., 73-572, 592
 TURESEBEKOV, A., 73-1088, 1639
 TURKEVICH, A., 73-3927
 TURKEVICH, A. L., 73-3904
 TURNBULL, A. G., 73-3718
 TURNEAURE, F. S., 73-289
 TURNER, F. J., 73-2566
 TURNER, N. L., 73-3960
 TURNER, R. C., 73-109
 TURNERY, D. A., 73-3396
 TURNOCK, A. C., 73-2038, 2611, 2855
 TUROVSKIY, S. D., 73-484
 TWIDALE, C. R., 73-995
 TYUL'KIN, V. G., 73-2476
 TYURIN, N. G., 73-1640
 TYUTNEVA, G. K., 73-2864
 UDAGAWA, S., 73-3421
 UDAS, G. R., 73-4315
 UDDU, O., 73-2308
 UDODOV, YU. N., 73-2584
 UDOVICHENKO, E. M., 73-3175
 UEBEL, P.-J., 73-32, 714
 UEDA, S., 73-1614, 3733
 UETANI, K., 73-804
 ULBRICH, H. H., 73-2870
 ULMER, J. C., 73-364
 ULRYCH, J., 73-1902
 UNGARETTI, L., 73-2369, 2415
 U.S. GEOLOGICAL SURVEY, 73-3587
 UNO, Y., 73-1229
 UPADHYAY, H. D., 73-1947, 3193
 URAS, I., 73-2299, 3533
 URBANI, D. M., 73-2078
 URCH, D. S., 73-1280, 1281
 UREY, H. C., 73-643
 USDOWSKI, E., 73-2576
 USDOWSKI, H. E., 73-431
 USHCHAPOVSKAYA, Z. F., 73-2800
 USMANOV, U. U., 73-484
 USOVA, L. V., 73-3983
 USPENSKAYA, A. B., 73-2864
 UTEKHIN, G. M., 73-2475
 UTLEY, R. W., 73-3305
 UYEDA, N., 73-4021
 UYTTERHOEVEN, J. B., 73-160
 UZUAKPUNWA, A. B., 73-4271
 VACHEY, H., 73-1940, 2926
 VACHIT, J., 73-869
 VAGHETTI, A., 73-1879
 VAIDYA, M. C., 73-2927
 VAIDYA, S. N., 73-2601
 VAIDYANADHAN, R., 73-940
 VAIL, J. R., 73-828, 830, 831, 2054, 4110
 VAKRUSHEV, V. A., 73-2664
 VALETTE, J., 73-2299
 VALETTE, J. N., 73-2299, 3115
 VALÉE, A.-M., 73-2273
 VALIER, T. L., 73-2985, 2988
 VAL'TER, A. A., 73-2798, 2828
 VAN ASSCHE, A. T., 73-3763
 VAN BREEMEN, N., 73-2727
 VANCE, E. R., 73-357
 VANCŮVÁ, L., 73-4067
 VAN DE GRAAF, W. J. E., 73-993, 994
 VAN DE KAMP, P. C., 73-2117
 VAN DEN BOOGAARD, M., 73-82
 VAN DER KAADEN, G., 73-743
 VAN DER VEEN, A. H., 73-3537

- VAN DER WEL, D., 73-1824
 VAN DIJCK, M., 73-3489
 VAN DIVER, B. B., 73-2040
 VAN HARTEN, D., 73-3113
 VAN LOENEN, R. E., 73-1923
 VAN LOON, J. C., 73-1191, 2308
 VAN MOORT, J. C., 73-200
 VAN OOSTERWYCK-GASTUCHE, M. C., 73-1823
 VANSANT, E. F., 73-160
 VAN TASSEL, R., 73-2536, 2911, 2916, 3239
 VAN THOOR, T. J. W., 73-1211, 2312
 VAN WILLIGEN, J. H. H. G., 73-3343
 VAN ZYL, J. P., 73-880
 VARADARAJAN, S., 73-935
 VARENTSOV, I. M., 73-2559
 VARMA, S. C., 73-4257
 VARMA, S. P., 73-2579
 VARMALOFF, N., 73-291
 VASENIN, A. R., 73-2605
 VASIL'YEV, YU. R., 73-3023, 3024
 VAUGHAN, D. J., 73-759, 2557, 2587, 2890, 3483
 VAUTIER, C., 73-3452
 VDOVYKIN, G. P., 73-734
 VEASEY, J. J., 73-1511
 VEDAM, K., 73-2606
 VEDDER, J. G., 73-3202
 VEIZER, J., 73-3108
 VEJNAR, Z., 73-690, 1029
 VELDE, B., 73-1604, 2120, 2616, 4229
 VELDE, D., 73-867
 VEL'DYAKSOV, F. F., 73-3182
 VELIKOV, D., 73-195
 VENDRYES, G., 73-3780
 VENIALE, F., 73-3373
 VENIER, J., 73-2208
 VENKATAKRISHNAN, V., 73-2417
 VENKATASUBRAMANIAM, V. S., 73-504
 VENKATAVARADAN, V. S., 73-619, 637
 VENKITASUBRAMANYAM, C. S., 73-2566
 VENTURELLI, G., 73-2806
 VENUGOPAL, D. V., 73-2110
 VERA, R., 73-2289
 VERDUCH, D. G., 73-422
 VERESHCHAGIN, L. F., 73-3315
 VERGARA, M., 73-951
 VERGARA, M. M., 73-922
 VERMA, P. K., 73-4337
 VERNET, J.-P., 73-1172, 1680, 1681
 VERNON, M. J., 73-3876, 3921
 VERNON, R. H., 73-3732
 VERSHKOVSKAYA, O. V., 73-766
 VERSTEGEN, J. M. P. J., 73-1581
 VESELSKY, J., 73-4185
 VESELY, V., 73-3324
 VESSILINOV, I., 73-1324
 VICENÍK, J., 73-437
 VIDAL, P., 73-1119
 VIETEN, K., 73-3083
 VIEUX, A. S., 73-56
 VIKHTER, B. YA., 73-737
 VILJOEN, E. A., 73-3320
 VILJOEN, M. J., 73-884, 3523, 4113
 VILJOEN, R. P., 73-884, 3523, 4113
 VILLARROEL, H. S., 73-2934
 VILLARI, L., 73-4189
 VINCENT, E. A., 73-3084
 VINCENT, H. A., 73-1610
 VINCENT, J. S., 73-2074
 VINE, F. J., 73-3065
 VINOGRADOV, A. P., 73-2767, 2768
 VINOGRADOV, V. I., 73-1717
 VINOKUROV, P. K., 73-1481
 VINTEN, G. S., 73-1987
 VIOLO, M., 73-2299, 3533
 VIRGO, D., 73-2764
 VISENTIN-JUSTIN, E., 73-4331
 VISHNYAKOVA, G. I., 73-1731
 VISTELIUS, A. B., 73-2981, 3063
 VISWANATHAN, K., 73-1844
 VISWANATHAN, S., 73-2754
 VISWANATHIAH, M. N., 73-4026, 4258
 VITA-FINZI, C., 73-4221
 VITALIANO, C. J., 73-3416
 VITRAC, A., 73-2199
 VIVALDI, J. L. MARTÍN, 73-1415, 1789, 1790
 VLADIMIROV, B. M., 73-3067
 VLADYKIN, N. V., 73-2499
 VLASOVA, S. P., 73-1426
 VLOGTMAN, J., 73-3337
 VOBECKY, M., 73-1777, 3914
 VOGEL, D. E., 73-519
 VOGLER, D. L., 73-1854
 VOGT, K., 73-3402
 VOJTÉCH, O., 73-1571
 VOKHMENTSEV, A. YA., 73-1849
 VOLFINGER, M., 73-1611
 VOLKOV, B. N., 73-2531
 VOLOKHOV, I. M., 73-3029
 VON DER BORCH, C. C., 73-2986, 2987
 VON ELLER, J.-P., 73-1014
 VON GAERTNER, H. R., 73-90
 VON KNORRING, O., 73-750, 1925, 1946
 VON PLATEN, H., 73-1984
 VON RADEN, H. V. R., 73-699
 VON RADEN, M. J. E., 73-699
 VOORHOEVE, R. J. H., 73-3702
 VORMA, A., 73-710, 711
 VOROB'YEV, I. M., 73-1528
 VORONOV, A. N., 73-1731
 VORTISCH, W., 73-2336
 VOSTROVA, S. I., 73-1321
 VOUDON, A., 73-3906
 VOVK, P. K., 73-2850
 VOYTOV, G. I., 73-1734
 VOYTOV, G. M., 73-2736
 VRÁNA, S., 73-1804
 VREDENBURGH, L. D., 73-3823
 VRUBLEVSKAYA, Z. V., 73-2376
 VRUGT, J. W. TER, 73-1582
 VUCETICH, C. G., 73-2061
 VYAL'OV, L. N., 73-1892, 1942, 2904
 WADA, H., 73-1557, 2586
 WADA, K., 73-3412, 3468
 WADE, F. A., 73-2219
 WADGE, A. J., 73-1117, 1952, 2967
 WADSWORTH, M. E., 73-1348
 WADSWORTH, W. J., 73-2952
 WAGNER, A., 73-4365
 WAGNER, F., 73-218
 WAHLBERG, J. S., 73-2668
 WAKEFIELD, J., 73-2138, 3157
 WAKITA, H., 73-391, 588, 589, 593, 733, 790
 WALDBAUM, D. R., 73-430, 1175, 2548
 WALDECK, H. W., 73-1984
 WALDHAUSROVÁ, J., 73-1980
 WALENTA, K., 73-806
 WALIA, D. S., 73-360
 WALKDEN, G. M., 73-1235
 WALKER, G. P. L., 73-952, 3084
 WALKER, P. H., 73-3408
 WALKER, P. L., Jr., 73-546
 WALKER, R., 73-2779, 3925
 WALKER, R. L., 73-2685, 2686
 WALKER, R. M., 73-2298
 WALLNER, A., 73-3407
 WALSH, J. N., 73-1829
 WALSH, P. T., 73-2078
 WALTER, L. S., 73-3889
 WALTER, M. R., 73-3821
 WALTON, A., 73-73
 WALTON, G., 73-3336
 WALTON, J. R., 73-3938
 WANG, C.-Y., 73-2163
 WANG, H., 73-2157
 WANG, N., 73-3708
 WANG, Y., 73-1249
 WÄNKE, H., 73-3929
 WANKLYN, B. M., 73-322
 WANLESS, R. K., 73-28, 1139, 1637
 WANMAKER, W. L., 73-1582
 WAPLES, D. W., 73-1687
 WÄPPLING, R., 73-2378, 2832
 WARD, C. R., 73-1090
 WARD, F. N., 73-3858
 WARD, J. C., 73-378
 WARD, M., 73-497
 WARDLAW, N. C., 73-2524, 2937
 WARE, N. G., 73-672, 2766, 3347
 WARNE, S. ST. J., 73-789
 WARNER, J., 73-1748
 WARNER, J. L., 73-3952
 WARREN, C. G., 73-1364, 2460, 3778
 WARREN, K., 73-2313
 WASER, J., 73-1273
 WASHBURN, A. L., 73-3369
 WASS, S. Y., 73-2859, 4002
 WASSERBURG, G. J., 73-3939
 WASSON, J. T., 73-597
 WATANABE, N., 73-783
 WATANABE, T., 73-94, 1089, 1885
 WATERS, A. C., 73-30, 2092
 WATKINS, N. D., 73-1959, 2048, 4179
 WATKINSON, D. H., 73-2820
 WATLING, R. J., 73-2308
 WATTS, A. B., 73-4121
 WATTS, B. J., 73-3685
 WATSON, A. E., 73-1167
 WATSON, D. F., 73-2653
 WATSON, J., 73-4098
 WATSON, J. V., 73-3157
 WATTERS, W. A., 73-853, 1808
 WATTERSON, J., 73-3157
 WATTERSON, J. I. W., 73-1184
 WATTERSON, L., 73-1184
 WATTS, A. B., 73-2021
 WAUCHOPE, R. D., 73-1216
 WAUSCHKUHN, A., 73-2299
 WAWNER, F. E., Jr., 73-358
 WAYMAN, M. L., 73-3226
 WEAVER, C. E., 73-3425
 WEAVER, F. M., 73-1853, 3155
 WEAVER, S. D., 73-503
 WEBB, J. S., 73-1738
 WEBB, P. K., 73-3032
 WEBB, R. W., 73-4036
 WEBBER, G. R., 73-2308
 WEBER, F. H., Jr., 73-3584, 3654
 WEBER, J. B., 73-167
 WEBER, J. N., 73-3318, 3624, 3829, 4279
 WEBER, K., 73-1217
 WEBER, L., 73-746, 1845
 WEBER-DIEFFENBACH, K., 73-3798, 4062
 WEBSTER, R., 73-463, 465, 2640, 2646, 2647
 WECHTER, M. A., 73-2793
 WEDEPOHL, K. H., 73-477, 121, 1692
 WEDOW, H., Jr., 73-1392, 139, 1399, 1400
 WEED, S. B., 73-167, 695
 WEEGE, R. J., 73-3618
 WEEKS, A. M. D., 73-2299
 WEHNER, H., 73-90
 WEIBEL, M., 73-3088, 4211
 WEIBLEN, P. W., 73-3887, 395
 WEIGAND, P. W., 73-509, 2774
 WEILL, D. F., 73-2563, 275, 3762, 3885, 3934
 WEIR, A. H., 73-193, 3371
 WEIS, P. L., 73-851
 WEISS, A., 73-3742
 WEISS, C. K., 73-3874
 WEISS, M. P., 73-3139
 WEISSBERG, B. G., 73-1168, 144, 1450
 WEISSBORN, A. E., 73-3568
 WEITZ, G., 73-3470
 WELDAY, E. E., 73-3864
 WELIN, E., 73-2189
 WELKE, H. J., 73-3
 WELLMAN, P., 73-14, 1132, 2211
 WELLMAN, T. R., 73-2560, 4199
 WELLS, A. F., 73-3445
 WELLS, A. K., 73-3360
 WELLS, M. K., 73-2109, 3360
 WELLS, N., 73-1625
 WELLS, R. A., 73-3257
 WENDEN, H. E., 73-3139
 WENGER, H., 73-4241
 WENK, E., 73-1148, 1841, 184, 4024, 4025, 4360
 WENK, H. R., 73-2566, 3474, 37, 37
 WERLEN-RUZE, B., 63-1499
 WERMUND, E. G., 73-2866
 WERTZ, V., 73-2188
 WEST, A. R., 73-96, 371, 1581
 WEST, H. W. H., 73-2542
 WEST, I. M., 73-4234
 WEST, W. S., 73-3581
 WESTBROOK, G. K., 73-4324
 WESTENBERGER, H., 73-255
 WESTERHOF, A. B., 73-770
 WESTERHOFF, A. B., 73-4038
 WETHERILL, G. W., 73-3917
 WEITZEL, R., 73-1791, 1841
 WETZENSTEIN, W., 73-1244
 WHELAN, J. A., 73-2235, 250, 2511, 2750
 WHETTEN, J. T., 73-3429
 WHITAKER, A., 73-2434, 2435
 WHITE, A. J. R., 73-675, 815, 19, 19
 WHITE, A. M., 73-2533, 2534
 WHITE, E. T., 73-1552
 WHITE, E. W., 73-3624
 WHITE, J. S., 73-764
 WHITE, J. S., Jr., 73-2184, 294, 4078
 WHITE, J. W., 73-1226
 WHITE, P. S., 73-1331
 WHITE, S., 73-924
 WHITE, W. B., 73-96, 330, 158, 2404, 2596
 WHITE, W. H., 73-2227, 2228
 WHITEHEAD, N. E., 73-1193
 WHITFIELD, G. G., 73-877
 WHITLOW, S. H., 73-3455
 WHITMAN, W. W., 73-3511
 WHITNEY, J. A., 73-2543
 WHITNEY, P. R., 73-1896, 3196
 WHITNEY, W. P., 73-1537
 WHITTAKER, A., 73-2525
 WHITTAKER, A. G., 73-1529
 WHITTEMORE, O. J., Jr., 73-445
 WHITTEN, D. G. A., 73-1213

- HITTON, J. S., 73-1625
 HYTE, R. J., 73-1423
 CHROWSKA, M., 73-4013
 CHROWSKI, Z., 73-4013
 CKMAN, F. E., 73-2671
 DDOWSON, J. R., 73-672
 DENFALK, L., 73-717
 EBE, R. A., 73-4122
 EBLEN, P. W., 73-2104
 ERMSA, J., 73-2343
 ESENER, H., 73-2328, 4223
 ESER, T., 73-1016, 2856
 EWORA, A., 73-189, 660, 3432
 GGINS, P. F., 73-1186
 GLEY, T. M. L., 73-3716, 3833
 GNALL, T. K., 73-1384, 3512
 GK, H. B., 73-604
 KSTRÖM, A., 73-2260
 LBAND, J. T., 73-1648
 LBER, D. P., 73-3251
 LCOX, W. R., 73-317, 1509
 LDEMAN, T. R., 73-3834, 3835
 LDEY, R. L., 73-624, 3878
 LFORD, G. E., 73-800
 LKENING, L., 73-619
 LKIN, R. B., 73-3960
 LKINS, A. L., 73-400, 401
 LKINS, R., 73-464
 LKINSON, J. F. G., 73-3073, 4202
 LKINSON, P., 73-1198
 LKS, E. M., 73-2624
 LLAIME, C., 73-1308, 2388
 LLEMS, V., 73-4237
 LLEY, H. G., 73-2564, 3692
 LLIAMS, A. F., 73-2521
 LLIAMS, D. A. C., 73-904, 1993, 3071
 LLIAMS, D. W., 73-2612
 LLIAMS, E. G., 73-3421, 4279
 LLIAMS, G. E., 73-2185
 LLIAMS, H., 73-3003, 4163
 LLIAMS, Mrs. H. R., Jr., 73-1098
 LLIAMS, I. R., 73-991
 LLIAMS, J. F., 73-1221
 LLIAMS, J. O., 73-2161
 LLIAMS, K. L., 73-2892
 LLIAMS, L. A. J., 73-2055, 2204
 LLIAMS, M., 73-2969
 LLIAMS, P. G. L., 73-3883
 LLIAMS, P. L., 73-966, 3124
 LLIAMS, P. P., 73-2399
 LLIAMS, R., 73-3882
 LLIAMS, S. A., 73-1935, 2943, 3944
 LLIS, J. P., 73-596
 LLMAN, H. B., 73-3434
 LLMOTT, W. F., 73-907
 LMETH, R., 73-3292
 LMSHURST, J. R., 73-903
 LSHIRE, H. G., 73-610, 2976
 LSON, A. F., 73-536, 539
 LSON, A. T., 73-821
 LSON, B. M., 73-1355, 1369
 WILSON, C. T. L., 73-1130
 WILSON, E. E., 73-2261
 WILSON, I. R., 73-2659
 WILSON, J. F., 73-3157
 WILSON, J. R., 73-2119, 2292
 WILSON, M. J., 73-208, 1214
 WILSON, M. R., 73-3272
 WILSON, R. C. L., 73-3112
 WILSON, R. L., 73-3084, 3228
 WILSON, W. E., 73-39, 3248
 WIMMENAUER, W., 73-865
 WIN, U. S., 73-3330
 WINCHESTER, J. A., 73-2115
 WINDLEY, B. F., 73-3157
 WINKHAUS, G., 73-405
 WINLAND, H. D., 73-4296
 WISE, B., 73-3872
 WISE, D. U., 73-1110
 WISE, S. W., Jr., 73-1853, 3155
 WISE, W. S., 73-4167
 WLOTZKA, F., 73-3929
 WODZICKI, A., 73-1449, 1450
 WOELFLE, R., 73-3912
 WOERMANN, E., 73-96
 WOJCIECHOWSKA, I., 73-4310
 WOLD, A., 73-96
 WOLF, C. J., 73-3968
 WOLF, W. R., 73-3923
 WOLLENBERG, H., 73-1180, 1188
 WOLLENBERG, H. A., 73-2308
 WOLLIN, J. C., 73-2643, 3238
 WOLTEN, G. M., 73-1529
 WONES, D. R., 73-2840, 3053
 WONG, A. S., 73-2834
 WOO, C. C., 73-2184
 WOOD, B. J., 73-211, 3731, 4203
 WOOD, D. F., 73-1714
 WOOD, D. S., 73-4092
 WOOD, G. H., 73-1414
 WOOD, J. A., 73-3947
 WOOD, J. C., 73-2187
 WOODALL, R., 73-276
 WOODHAMS, F. W. D., 73-1331
 WOODS, C. P., 73-767
 WOODS, J., 73-1499
 WOODS, M. J., 73-2043
 WOODSIDE, J. M., 73-3236
 WOODSWORTH, G. J., 73-2751
 WOODWARD, L. A., 73-2007, 3575
 WOOLLEY, A. R., 73-4172
 WOOSTER, W. A., 73-3370
 WRAY, E. M., 73-4164
 WRIGHT, D. A., 73-616
 WRIGHT, I. H., 73-712
 WRIGHT, J. B., 73-871, 1342, 2471, 3091
 WRIGHT, J. K., 73-3686
 WRIGHT, L. A., 73-3658
 WRIGHT, R. J., 73-1765
 WRONKA, G., 73-2291
 WSZOLEK, P. C., 73-1752, 3945
 WUNDER, S. J., 73-4224
 WYART, J., 73-1611
 WYLLIE, P. J., 73-97, 1526, 1615, 1616, 1743, 2541, 2574, 3684
 WYRWICKI, R., 73-3432
 YABUKI, H., 73-626
 YABUSHITA, S., 73-1771
 YAGI, K., 73-413, 1499
 YAJIMA, T., 73-505
 YAKHONTOVA, L. K., 73-1929
 YAMADA, H., 73-94
 YAMAGUCHI, G., 73-444, 1538, 3694
 YAMAGUCHI, S., 73-2586
 YAMAGUCHI, M., 73-20, 21, 22
 YAMAGUCHI, S., 73-1557
 YAMAGUCHI, T., 73-346
 YAMASHITA, M., 73-143
 YANAGI, T., 73-20, 21, 22, 23
 YANG, C. N., 73-1249
 YANG, H.-Y., 73-1592, 3724
 YANITSKII, I. N., 73-2308
 YARIV, S., 73-158, 2322, 2323
 YASSO, W. E., 73-3135
 YATES, R. G., 73-3568
 YEFIMOVA, E. S., 73-3068
 YEGAROVA, M. G., 73-1038
 YEGOROV, A. YE., Jr., 73-1038
 YEGOROV, V. M., 73-2605
 YEGOYAN, V. L., 73-2974
 YELLUR, D. D., 73-1436
 YEN, T. P., 73-899, 943, 2091, 2144
 YERKES, J., 73-1313, 2441
 YERKIN, V. M., 73-1381
 YERMAKOV, V. I., 73-2737
 YIN, L., 73-605
 YIN, L. I., 73-224
 YODER, H. S., Jr., 73-3677
 YONEHARA, N., 73-60
 YONK, A. K., 73-3580
 YONG, R. N., 73-104
 YOON, H. S., 73-3214
 YOSHIDA, M., 53-59, 60
 YOSHINAGA, N., 73-3412, 3468
 YOSHIKAWA, T., 73-440, 441, 442
 YOTSUKURA, N., 73-3847
 YOUNG, C.-C., 73-416, 579, 1907
 YOUNG, B. R., 73-2965
 YOUNG, D. A., 73-2042
 YOUNG, E. J., 73-2252
 YOUNG, G. M., 73-3132
 YOUNG, R. A., 73-2427, 2429, 3503, 3504, 3721
 YOUNG, R. C., 73-418, 3738
 YOUNG, W. M., 73-1077
 YOUNGBERG, C. T., 73-126
 YOUSSEF, M., 73-4252
 YOUSSEF, M. I., 73-1477
 YOW, H., 73-2359
 YU, S.-CH., 73-2424
 YUASA, S., 73-1622
 YUDIN, R. N., 73-1936
 YUHAS, D., 73-3925
 YUL, S., 73-1895
 YUND, R. A., 73-439
 YURCHENKO, S. A., 73-4014
 YURYSHEV, M. V., 73-1429
 YUSOPOV, S. SH., 73-2861
 YVON, J., 73-3780
 ŽABIŃSKI, W., 73-2807
 ZACHARIASEN, W. H., 73-1290
 ZACHRISSON, E., 73-1413
 ŽÁK, H., 73-666, 1418, 2493
 ZAKRUTIN, V. V., 73-483
 ZAKRZHEVSKAYA, N. G., 73-724
 ZALKIN, A., 73-2444
 ZANAZZI, P. F., 73-3495
 ZANETTIN, B., 73-4331
 ZANETTIN LORENZONI, E., 73-4015
 ZANZARI, A. R., 73-3495
 ZARASKIY, G. P., 73-1598
 ZARAYEN, C., 73-4213
 ZARTMAN, R. E., 73-1143
 ZAVEL'SKIY, F. S., 73-1126
 ZAV'YALOVA, T. V., 73-1833
 ZAYTSEV, N. S., 73-2532
 ŽEBERA, K., 73-1777
 ZECK, H. P., 73-1054, 1805, 2821
 ZEIRA, S., 73-386
 ŽEMJO, I., 73-4013
 ZELLER, R. A., Jr., 73-4129
 ZELWER, C., 73-2446
 ZEMAN, J., 73-1319, 2408
 ŽEMLIČKA, J., 73-1573
 ZEN, C. S., 73-1570
 ZEN, E.-AN, 73-2553
 ZENGER, D. H., 73-3306
 ZENG SHI-LANG, 73-4115
 ZENTAI, P., 73-498
 ZHARIKOV, V. A., 73-423
 ZHAROV, E. V., 73-744
 ZHELYAZKOVA-PANAYOTOVA, M., 73-1898
 ZHUKHLISTOV, A. P., 73-2376
 ZIMMER, C. H. E., 73-3352
 ZIMMERMAN, D., 73-2779
 ZIMMERMAN, D. W., 73-573
 ZIMMERMANN, J.-L., 73-1118, 1806
 ZIMMERMANN, R. A., 73-2299
 ZOBIN, V. M., 73-3087
 ZOLOTAREV, B. P., 73-2736
 ZOLOTAREV, V. N., 73-888
 ZOLOTUKHIN, V. V., 73-3023, 3024
 ZOLOYEV, K. K., 73-271, 2954
 ZOLTAI, T., 73-2424
 ZONDERHUIS, J., 73-74, 75
 ZOOK, T. F., 73-454, 4168
 ZORIN, YU. A., 73-1427
 ZORINA, L. D., 73-1427
 ZUBKOV, L. B., 73-2815
 ZUBOVIC, P., 73-1768
 ZUFFARDI, P., 73-2299, 3533
 ZUSSMAN, J., 73-1750, 3880
 ZVEREV, N. D., 73-2828
 ZVEREV, V. P., 73-2704
 ZVYAGIN, B. B., 73-1882, 2376, 2383
 ZWARICH, M. A., 73-103
 ZWEIFEL, K. A., 73-3915
 ZYBIN, V. A., 73-2501



SUBJECT INDEX

to *Mineralogical Abstracts*, vol. 24. Names of REGIONS are printed in small capitals. Subjects in lower-case roman, and localities in italics.

- berdeenshire v. Scotland
bitibi v. Canada
basrookites, chem. data on some mins., 73-672
absolite[†], composition, 73-1914
absorption spectrometry, flameless, determination of Hg, 73-52
bu Khabi v. Trucial States
bu Swayel v. Egypt
bukuma plateau v. Japan
bukumalite, Japan, chem. opt. data, 73-733
canthite, Poland, in ores, 73-3535
Cera Plains v. Ghana
acetate peels v. peel technique
chavallite, in system FeS₂-FeSe₂, lattice constants, X-ray densities, *d*-values, 73-377
acid intrusions, Wales, geochem., 73-1661
acid-soluble minerals, microgravimetric determination of acid-insoluble impurities in anal. of, 73-2275
cmite v. pyroxene
concagua v. Chile
ctinolite v. amphibole
activities, calculation from distribution equilibria, 73-3662
damant Mt., B.C. v. Canada
damellite, New South Wales, rapakivi texture in, 73-3047; W. Australia, petrol., 73-3042
damite, Mexico, paramagnetic resonance of Fe³⁺, 73-2436; cuproadamite, New Jersey, 73-4370
delade mine, Dundas, Tasmania v. Australia
diabatic decompression, & temperature changes in geol. processes, 73-1073
dirondaek Mts., New York v. USA
dularia v. feldspar
dularia, Switzerland, high K/Ar ages, 73-3284
egirine v. pyroxene
eschynite, Switzerland, EM anal., 73-746
far v. Ethiopia
FGHANISTAN, lake waters & sediments, min. & chem. changes, 73-3812; lapis lazuli, 73-2641
FRICA, Eastern Rift System, geol., 73-2055; new Bi mins. in pegmatites, 73-1946; Precambrian rocks, palaeomagnetism, 73-2167; central, lavas from tectonic graben, chem. anal., 73-3800, Mesozoic igneous activity, 73-831; central & west, RE pegmatites & related apfites, quartz veins & min. deposits, 73-291; east, lavas in rift system, tr. elems, origin, 73-503; south, evolution of early Precambrian crust, 73-3157, Limpopo mobile belt, structure, 73-3157, metamorphism as a guide to depth of top of mantle, 73-4096; southern, localization of Sn mineralization, 73-2470; southeast, Karroo volcanic cycle, 73-874; west, Kibaran ages, 73-2203, red soils, pedogenesis, 73-2337; Lake Kivu, evolution of Nyiragongo magma, 73-3031, micro-crystalline spherulite in resin globules, 73-499
fwillite, photographs of magnified crystals, 73-1203
gate, Brazil, photographic study, making of acetate peels, 73-1149; Idaho, in silicified Sequoia tree, 73-458; Michigan, 73-1102; Mississippi, 73-1098; Queensland, in gravel, 73-2644
Agate Creek, Queensland v. Australia
Age determination, archaeological ceramics, 73-573; behaviour of Pb isotopes during granulite facies metamorphism, 73-1129; Ca-rich achondrites, 73-3959; closing temperature of geochronological system, 73-3268; discordant K/Ar ages & sample purity, 73-3271; extraction of U & Th from zircon for, 73-3269; granites, & zircon growth, 73-3981; hydrothermal sinters, 73-1145; I-Xe method for meteorites, 73-3963; Luna 20 fines, Ne radiation age, 73-3938; lunar rocks, 73-607, 2771, 3897, 3925, Apollo 12, 73-3917, revision, 73-3876; metamorphic Caledonides, 73-1116; mica by fission-track method, 73-2239; obsidian hydration dating of basaltic activity, 73-30; tellurium mins. by Te¹³⁰, Xe¹³⁰, 73-3270; Tertiary f₁₋₂ scale, 73-2209; U-series systematics in natural materials, 73-29; use of Varian Mat GDI50 for Ar anal., 73-1146; weathering profiles, 73-541; Alberta, geochronology of Canadian shield, 73-2226; Algeria, Precambrian chronology, 73-2201; Alps, detrital zircons, 73-3283; Antarctica, 73-24, basaltic hyaloclastites, 73-2218, basement rocks, 73-25, granite, 73-3058, igneous rock suites, 73-26, intrusions, 73-2219, K/Ar ages, list, 73-1134; lake water, 73-2217, minerals, 73-1138, plutons, 73-2222, seal bone in deposit with mirabilite, 73-781, various, 73-1137, 2220, volcanics, 73-2215, 2216; Argentina, porphyry Cu deposits, 73-1144, various rocks, 73-2220; Arizona, intrusion & ore deposition, 73-3297; Australia, Archaean geochronology, 73-17, granitic rocks, 73-18, 2212, igneous rocks, 73-2213, U mineralization, 73-2210; Austria, granulites, 73-3284; Baltic Shield, 73-3274, 3275, 3276, 3277; Bohemian massif, detrital zircons, 73-3283; Brazil, amphibolite, metamorphism, 73-1470; British Columbia, Cu-Fe deposits, 73-28, granodiorite, 73-2229, igneous rocks, 73-2230, Mo-W mineralization, 73-2228; British Isles, Tertiary igneous rocks, 73-3279; California, volcanic rocks & Au veins, 73-3298; Cambodia, alluvial gem deposit, 73-3290; Canada, archaeological samples, techniques, 73-3292, granite, 73-2224, Rb/Sr isochron studies, 73-1139; Canada, NWT, Echo Bay group, 73-2481; Canadian Shield, integrated model for Pb isotope evolution, 73-3295, orogenies, 73-2233, revised Precambrian time scale, 73-2225; Chile, chronology of crystalline rocks, 73-2221, 2222; China, Precambrian metamorphics, 73-20; Congo, gneisses, 73-2207 granite, 73-2208, lavas, 73-2206, uraninites, 73-2205; England, Cretaceous fuller's earth, 73-1234, Ingletonian, 73-3280, olivine-dolerite intrusions, 73-1117, volcanic & intrusive rocks, 73-2197; Faroe Is, volcanic ash in peat bogs, 73-2193; France, basic dykes of western American massif, 73-1118, diorite, 73-1119, granite, 73-2198, granitic massif, acid volcanics, 73-2198, intrusions, 73-4, lower limit of Villafranchian, evolution of south east Massif Central, 73-3281; Germany, Tertiary volcanics, 73-1120; Haute-Volta, Birrimian orogeny, 73-2202; Hudson Bay, metamorphism, 73-2231, 2232; Iceland, Pleistocene basalts, 73-3291; Idaho, Pb mineralization, 73-1143; India, metamorphic episodes, 73-3289, Precambrian, 73-19; Italy, carbonized branch in ash bed, 73-2200, Miocene sediments, 73-4250; Japan, alkaline rocks, 73-21, granite, 73-22, granodiorite, 73-23; Kenya, Rift volcanics, 73-1122, 2204; Labrador, basaltic dykes, 73-3296; Maine, granites, 73-1140; Manitoba, lead ores, 73-2234, 3293; Michigan, granitic complex, 73-4125, Keweenaw rocks, 73-1141, quartz porphyry, 73-1142; Mid-Atlantic Ridge, basalt, 73-27; Montana, Pb mineralization, 73-1143; Moon, Ocean of Storms, 73-3921; New Caledonia, basalts, 73-1136; New Guinea, Miocene volcanics, 73-2209; New Mexico, basement rocks, 73-3299; New South Wales, basalt, 73-13, leucite-bearing rocks, 73-14; New Zealand, K/Ar, Rb/Sr, zircon ages, list, 73-1134, lamprophyre dykes, 73-1132, radiocarbon ages list, 73-1135, volcanics, 73-1133; Newfoundland, time span of late Precambrian, 73-2223; Nigeria, metamorphic basement, 73-2203, volcanics, 73-11; Norway, basal granitic gneisses, 73-3272, metamorphism, 73-1115, Rb-Sr geochronology, 73-1, Rb/Sr whole-rock isochron, 73-3273, volcanic ash in peat bogs, 73-2193; Poland, granulites, 73-7, 8, 9, 10; Portugal, W-Sn mineralization, 73-5; Queensland, geochronology & structure, 73-1130, granites, volcanics, 73-1131; Rockall Bank, igneous rocks, 73-2194; Russian SFSR, Devonian dolerite, 73-887, granulite complexes, 73-1123, metamorphism, 73-1124, Neogene & Quaternary effusives, 73-3286; Saskatchewan, gneiss & discordant pegmatite, 73-3294; Saudi Arabia, layered gabbros, 73-3035; Scotland, geochronology of Lewisian, 73-3278, granulites, 73-2195, Scourian, 73-3; Siberia, late Pleistocene glaciation, 73-1126; S. African continental shelf, Tertiary volcanics, 73-873; S. Carolina, hydrothermally altered areas, 73-2237; Spitzbergen, glaucofan schists, 73-1041; Sweden, basalt, 73-2192, extrusive & intrusive rocks, 73-2189, granite, syenite, 73-2190, porphyry, 73-2191, volcanic ash in peat bogs, 73-2193; Switzerland, Bergell massif, 73-3282, fissure mins., 73-3284, minerals from Alpine clefts, 73-1121; Taiwan, metamorphic rocks, 73-1127; Tanzania, mineralization, 73-2214; Texas, basement rocks, 73-3299; Turkey, Cu deposits, 73-3594; Uganda, Precambrian granitics, 73-12; Ukrainian Shield, subdivision of granites, 73-3287; Utah, copper mineralization, 73-287, intrusive rocks, 73-2236, porphyry-type mineralization, 73-287, various rocks, 73-2235; W. Australia,

Age determination, (contd.)

apparent age of 'porcelanite', 73-1128, granitic rocks, 73-16, lamproites, 73-2211, metamorphics, 73-15; *Yukon*, porphyry Cu-Mo deposit, 73-2227; *Zaire*, granites, 73-3288

Agglomerates, *Uganda*, Pleistocene, 73-959, reinterpretation, 73-960

Agly, *Pyrénées-Orientales v. France*

Agmatite, *India*, in gneisses, 73-2141

Agricolides, geochem. group of elements, 73-560

Aguitarite, *New Zealand*, data, 73-767

Agulhas Bank v. *S. Africa*

Ahaggar v. *Algeria*

Aiguilles Rouge, *Alps v. Switzerland*

Aikinite, crystal structure, 73-1332; *USSR*, 73-1945

Ain v. *France*

Air pycnometer, for rapid quantitative anal. of min. samples, 73-2249

Aisne v. *France*

Ajmer, *Rajasthan v. India*

Akita v. *Japan*

Akita-komaga-take v. *Japan*

Aktashite, *Russian SFSR*, new data, 73-2938

Alabama v. *USA*

Alabandite, *Bohemia*, in Mn deposit, 73-2493

Alabaster, *Egypt*, min., chem., 73-3634, chem., 1916

Alacrán, *Pampa Larga v. Chile*

Alappanur, *Tamil Nadu v. India*

Alaska v. *USA*

Albany, *W. Australia v. Australia*

Albersweiler, *Landau v. Germany*

Albert Canyon, *B.C. v. Canada*

Alberta v. *Canada*

Albite v. feldspar

Alcaparroso v. *Chile*

Allichar v. *Greece*

Aldan Shield, *Russian SFSR v. USSR*

Aldress, *Shropshire v. England*

Alegria, *Minas Gerais v. Brazil*

Algae, blue-green, & induced changes in ^{13}C fractionation, 73-2707; stable C isotopes in blue-green mats, 73-1686

ALGERIA, *Ahaggar*, chronology of Precambrian, 73-2201; *Rhoude-el-Baguel*, well-crystallized 1 M illite in sandstone, 73-3406; *Zerhamra*, meteorite find, 73-2790

Algyő v. *Hungary*

Alkaline complex, *Norway*, petrol. significance of gravity anomalies, 73-2958

Alkaline-earth aluminates & their hydrates, crystal structures, 73-1318

Alkaline intrusions, *Quebec*, igneous differentiation models, 73-4166

Alkaline magma series, TiO_2 content distinction from shoshonitic series, 73-817

Alkaline rocks, genesis, 73-3734; variation of rare elem. content of nepheline in, 73-4030; volatile components involved in crystallization, 73-518; *Australia*, lineages, 73-906; *India*, petrog., 73-893; *Japan*, RE distribution, 73-3802

Allanite, *Antarctica*, from quartz monzonite, EM study, 73-2817; *Colorado*, from yttrifluorite, 73-662; *New Zealand*, non-metamict in hornfels, 73-1803; *Ontario*, altered, 73-2923; *Quebec*, 73-1094; *Romania*, chem. anal., 73-661; *Switzerland*, d-values, 73-4365; *Zambia*, non-metamict, 73-1804

Allargentum, *Ontario*, occurrence, composition, 73-3555

Allemontite, *Manitoba*, & its alteration products, 73-2900

Alleppey, *Kerala v. India*

Alloclastite, *Ontario*, anal., 73-3554

Allophane, Fe-bearing, co-existence states of Fe in, 73-349; morphology, 73-1220; OH groups in, 73-3743; synthesis of Fe-bearing, 73-348; *Australia*, with high $\text{SiO}_2/\text{Al}_2\text{O}_3$ ratio, 73-3410; *Hawaii*, in saprolite of basalt, 73-3412; *Missouri*, nodules from kaolinite in shale, 73-3409

Allt Slapin, *Inverness v. Scotland*

Alluvial placers, geol. features, 73-1363

Almaden v. *Spain*

Almandine v. garnet

Almennigen, *Nordfjord v. Norway*

Almeria v. *Spain*

Alpi Maritime v. *Italy*

Alps, age & origin of detrital zircon in Permian basement, 73-3283; b dimensions of muscovites in low-grade metamorphic rocks, petrol. & geol. significance 73-1826, 2837; denudation rate, 73-6; deposition of Mn & Fe carbonates & silicates in Liassic marls, 73-2299; Helvetic nappes, strain values, 73-4092; localities for fluorite specimens, 73-3238; *Lepontine*, metamorphism of siliceous dolomite rocks, 73-2127; *Monte Rosa*, Furgg zone, petrog., min., 73-1791; v. also individual countries

Altai Mts., *Russian SFSR v. USSR*

Altenburg v. *Germany*

Alto Adige v. *Italy*

Alto Alentejo v. *Portugal*

Alumina, beneficiation of low grade laterites for production of, 73-3521; β -phase equilibria & characterization of phases, 73-361; determination in iron ores, slags and refractories, 73-46; *Pakistan*, high content in clay, 73-3441

Aluminium, -amalgam, in min. synthesis, 73-312; association with Ir in L-chondrites, 73-3969; atomic absorption spectroscopy analytical scheme, 73-48; determination, by compleximetric titrations, 73-54, in presence of much Mn, 73-3324; geochemical mechanics in weathering, 73-148; X-ray spectrographic anal. in silicate rocks, 73-66

— minerals & compounds, alkaline earth aluminates & their hydrates, crystal structure, 73-1318; borates, indexed X-ray powder data, cell parameters, 73-1553; aluminosilicates, anal. by XRF spectrometry, 73-2288; determination of coordination number, 73-1280; Fe-substitution in synthetic oxides & hydroxides, 73-1549; hydroxide complexes, effect of ageing on, 73-1551; hydroxides, ferri-ferous, structure problems, 73-4048; polymorphs, development of crystalline structure on ageing, 73-2580

Alunite, *Italy*, S isotope abundances in deposits, 73-496; *Missouri*, Na-rich, from kaolinite nodules in shale, 73-3409; *Nevada*, primary & secondary, 73-1643; *USSR*, *Kuraminskiy Mts.*, occurrences, 73-1088

Avarães v. *Portugal*

Alvikite, *Pakistan*, veins in granite, 73-4314

Alwar, *Rajasthan v. India*

Amami-oshima v. *Japan*

Amarathi, *Andhra Pradesh v. India*

Amargosa Desert, *Nevada v. USA*

Amazon R. v. *Brazil*

Amb State v. *Pakistan*

Amba Dongar, *Chota Udaipur, Gujarat, v. India*

Ambasaguas v. *Spain*

Amblygonite, visible & near-IR spectra, 73-1066; *Rwanda*, in phosphate nodules, 73-1925; *S. Dakota*, 73-2538

Amblygonite-montebrazite minerals, F content, phys. properties, 73-4071; *Manitoba*, chem. anal., phys. props., 73-2931

Amchitka I., *Alaska v. USA*

Amethyst, chem. & colour, 73-286; colour as geothermometer, 73-263; *Michigan*, 73-1102; *Ontario*, large clusters, 73-456

Amieira v. *Portugal*

Amino acids, & purines, synthesis zeolite catalysts, 73-3763; in *Organo* meteorite, 73-1769

Amirante Is. v. *Indian Ocean*

Ammonium compounds, ammonioborates

— crystal structure, 73-238; bromide, transformation $\text{Fm}3m$ to $\text{Pm}3m$, 73-244; chloride, experimental PTFC diagram for aqueous solutions of, 73-260; feldspar & mica, formation & stability, 73-1501; NH_4Cl , dendritic growth, 73-336; $\text{NH}_4\text{H}_2\text{PO}_4$, crystal growth, 73-150; $(\text{NH}_4)_2\text{HPO}_4$, crystal structure, 73-1338

Amphiboles, Ca-, & coexisting biotite principal component anal., 73-376; calciferous, Mössbauer spectra, 73-283; clino-amphiboles, positional disorder A-site, 73-1302; hydroxyl stretching frequency, 73-2373; stability in mantle, 73-352; *Bavaria*, in eclogite, phys., chem. data, 73-2818; *Czechoslovakia*, chemical composition in metamorphics, 73-179; *India*, alkali-, in syenites, chem., optical data, 73-1819; paragenesis plagioclase, 73-1817; *Japan*, Na-rich, associated with jadeite, 73-1814; *Yugoslavia*, specimen, 73-4362

—, actinolite, impurity in talcum powder, 73-698; *Guyana*, rimmed by hornblende, 73-1817; *Japan*, Na-rich, associated with jadeite, 73-1814; *Yugoslavia*, specimen, 73-4362

—, anthophyllite, *Russian SFSR*, in cordierite-norite complex, chem. anal., 73-683

—, arfvedsonite, *Labrador*, Mössbauer spectra, 73-226

—, crocidolite, *Greenland*, as impregnation & veinlets, 73-1822; *S. Africa*, comparison of two occurrences, 73-680

—, crossite, *Spain*, in metabasite, 73-3170

—, cummingtonite, compatibility with gedrite & cordierite, 73-3736; crystal structure of high, 73-1301; in volcanic rocks, & P_{total} , $P_{\text{H}_2\text{O}}$, 73-4203; *Guyana*, exsolved by hornblende, 73-1817

—, ferrohastingsite, *Japan*, data, 73-67; *Massachusetts*, significance in microcline perthite granites, 73-1821

—, ferropargasite, stability in neutral chloride solutions, 73-417

—, ferrotschermakite, *Ontario*, crystal structure, 73-2372

—, gedrite, compatibility with cummingtonite & cordierite, 73-3736; *Canada*, *NWT*, opt., chem. X-ray powder diffraction data, cell parameter data, 73-2834

—, glaucophane, problems of metamorphic origin, 73-1042; *Norway*, in schists, 73-1041

—, grunerite-cummingtonite, *Czechoslovakia*, genesis in skarns, 73-1793

—, holmquistite, Mössbauer spectrum, "best fit", 73-2374; *Ukraine*, asbestos, data, 73-682

—, hornblende, fission track annealing, 73-341; in calc-alkaline volcanics, 73-675; *Alps*, opt., chem., data, 73-179; hornblende, *California*, & coexisting biotite from granitic rocks, 73-2836

- nphiboles, hornblende, (*contd.*)
Czechoslovakia, from pluton, opt., chem. characteristics, 73-1818, with high Cr content; 73-687; *France*, tschermakitic, in diorites, 73-676; *Germany*, in lamprophyres, min. data, 73-677; *Guyana*, associations with actinolite, & with cummingtonite, 73-1817; *Italy*, specimens, 73-3240 & kaersutite, Japan, crystal structure, 73-225
 -pargasite, stability in melting range, 73-3739; *Russian SFSR*, in cordierite-norite complex, chem. anal., 73-683
 -pargasite-ferrohastingsite, in shoshonitic association, chem., 73-672
 -richterite, fibrous, synthesis under hydrothermal conditions, 73-1600
 -riebeckite, *Massachusetts*, significance in micropertite granites, 73-1821; *USSR*, in pegmatite, data, genesis, 73-1820
 -tremolite, fluorine-hydroxyl substitution, 73-1599; impurity in talcum powder, 73-698; phase relations with talc in metamorphic carbonate sediments, 73-3740; K-feldspar + H₂O + CO₂ = phlogopite + calcite + quartz, 73-2614; *Arizona*, with high richterite-molecule content, 73-2833; *New Caledonia*, electron-probe anal., 73-2835; *Ontario*, -diopside dolomitic marble, origin, 73-3156
 -tremolite-actinolite, *Norway*, asbestos mins., in Ag deposit, 73-1824
 nphibolites, *British Columbia*, petrol., structure, 73-1032; *Canada*, major & tr. elem. anal., 73-2146; *Czechoslovakia*, petrochem., 73-474, with high Cr₂O₃, 73-687; *Japan*, chem. reaction with gneiss, 73-1039; *New Jersey*, Mn & Zn in, adjacent to deposits, 73-1706; *Norway*, -gneiss transitions, chem., 73-2721; *Tyrol*, occurrence & breakdown of paragonite & margarite, 73-4016
 nphibolite facies rocks, *Norway*, H₂O, CO₂ in cordierite, 73-1806
 -calcite, crystal structure, 73-1313; -dawsonite association, 73-2622; free energy from hydrothermal data, 73-3669; new data on series with wairakite, 73-726; piezoelectric effect, 73-1857; primary with calcite in phonolite, 73-3032; stability, 73-3750; *Italy*, in 'pietra verde', distribution, correlation with albite, 73-727; *Manitoba*, caesian, 73-2872; *New South Wales*, in coal measures, 73-1920; *Pakistan*, formation in soils, 73-3417; *S. Africa*, in sandstones, as marker, 73-4033; *Taiwan*, in tuff, composition, genesis, 73-1858; *Wyoming*, & K-feldspar in tuffs, 73-2871
 -analyser, non-dispersive laboratory, 73-2287
arak v. Iran
 -karakite, possible name for new mineral, (Ca, Zn)₂(OH)₂Cl, 73-1934
 -tase, structure refinement at several temperatures, 73-3476
atolia v. Turkey
adalgá, Catamarca v. Argentina
 -adulsite, gems, valuation principles, 73-466; *Italy*, in pegmatitic rock, opt., chem., X-ray data, 73-3990; *Scotland*, in margin of granite, 73-858; *S. Africa*, reserves, 73-3633
 -des, facts & theories, 73-3015; also *v. Ecuador*
 -idesine *v. feldspar*
 -idesite, determination of Pb by anodic stripping anal., 73-1165; magma, tectonic aspects, 73-4176; *Azores*, use of colorimetric index in petrog., 73-2053; *Czecho-*
slovakia, origin of almandine garnet in, 73-654; *Elba*, geochem., 73-1984; *England*, age, 73-2197; *Lake District*, almandine-pyroxene phenocrysts in, genetic significance, 73-860; *New South Wales*, tholeiitic of high-P origin, 73-4202
Andhra Pradesh v. India
Andia, Lake Tchad v. Tchad
 -Andradite *v. garnet*
Anglesey v. Wales
 -Anlesite, *New Jersey*, 73-4370; *New Mexico*, specimens, 73-3252; *Tasmania*, 73-1091
 ANGOLA, age of granite, 73-2208, of gneiss, 73-2209; coast, geol., salt deposits, 73-1954; *Cuanza Sul*, Sr-aragonite deposited by hot springs, 73-4065
 Anhydrite, elastic properties, 73-3216; gypsum-, equilibria, 73-3714; *Jamaica*, origin of deposits, 73-2526; *Japan*, in kuroko deposit, S & O isotopes, 73-1645; *S.W. Africa*, primary in Precambrian gneisses, 73-777; *USSR*, *Kuraminskiy Mts*, occurrences, 73-1088
 Ankaramite, *India*, dykes, petrol., chem. anal., 73-3070
 Ankerite, manometric determination, 73-4067; *Colorado* & *Utah*, in oil shale, 73-2919; *Italy*, specimens, 73-3240; *Switzerland*, opt. data, 73-4365; *Tyrol*, exsolved, with calcite matrix, 73-786
 Annabergite, visible & near-IR spectra, 73-1066; *Ontario*, supergene min., 73-3562
Annette I., Alaska v. USA
 -Annite *v. mica*, lepidomelane
 Anodic stripping analysis, of lead, 73-1165
 Anorthite *v. feldspar*
 Anorthosites, chem. characteristics, significance, 73-2676; lunar, 73-2757, min. 73-581; lunar, RE & other abundances, 73-593; *Greenland*, Xe isotopic composition, 73-512; *Iceland*, as inclusions in Tertiary dolerite, 73-4180; *New York*, leuconite inclusions in, 73-849; *Quebec*, deformation textures, 73-3007, tectonic evolution, 73-3008, shock-metamorphosed opt. & X-ray properties of mins. in, 73-847; *USSR*, Precambrian, types and distribution, 73-1056
 Anorthosite-mangerite series, *Norway*, pyroxenes & olivines in, 73-673
 ANT rocks, lunar, anorthositic-noritic-troctolitic, 73-3935
 ANTARCTICA, age of various rocks, relation to Gondwanaland, 73-2220; chem. of polar snows, 73-1725; K/Ar ages, 73-1134; sulphate and carbonate salt efflorescences, first reported occurrence of hexahydrate, 73-779; west, age of plutons, 73-2222, Cainozoic volcanism, structural & petrol. characteristics, 73-951; *Beardmore Glacier*, Jurassic tholeiites, 73-911, *Ida granite*, modal, chem. anal., age, 73-3058; *Byrd Station*, ice core anal., ash bands in, 73-3100; *Coats Land*, age of Littlewood volcanics, 73-2216; *Darwin Mts.*, sedimentology of Darwin tillites, 73-997; *Deception I.*, 1969 eruption, 73-966, 1970 eruption, geol., chem., petrol., 73-3101, 3102, 3103, Sr isotopes in volcanic rocks, 73-2684; *Enderby Land*, *Molodzhnaya Station*, Precambrian rocks, 73-3016; *Lassiter Coast*, composition of Jurassic sandstones, 73-3124; *McMurdo area* & *Ford Ranges*, Sr isotope ratios in ultramafic nodules & host basalt, 73-516; *Marie Byrd Land*, age of intrusions, geol., 73-2219, Quaternary volcanism, 73-3104, volcanic evidence for early Tertiary glaciation, 73-2218, volcanic rocks, petrog., 73-965; *Marie Byrd Land* & *Ellsworth Land*, spatial variation in Cainozoic volcanism, 73-3056; *Pensacola Mts.*, age of igneous rocks, 73-26, *Dufek intrusion*, chem. trends, 73-514, density of layered gabbroic complex, 73-3059; *Queen Maud Land*, age of lavas in Trollkjellrygg Group, 73-2215, Permian rocks, petrol., 73-3145; *Theil Mts.*, late Precambrian silicic pyroclastic volcanism, 73-3057; *Transantarctic Mts.*, age of rocks and minerals, 73-24; *Victoria Land*, diagenetic syngenite, 73-778, *McMurdo* volcanics, Sr isotopes, 73-2685, mirabilite & age of associated seal bones, 73-781, orbicular granitic rocks, 73-912, Rb/Sr ages, 73-1137, *Taylor Valley*, allanite from quartz monzonite, EM study, 73-2817, K/Ar ages, 73-1138, origin of salts, 73-524; *Victoria Valley*, *Mount Insel*, basement geol., 73-3203; *Weddell Sea*, sediments, tr. elem. chem., heavy mins., 73-4266; *Wright Valley*, age of basement, 73-25, *Lake Vanda*, age & tritium content of water, 73-2217
 Anthonite, new data, 73-750
 Anthophyllite *v. amphibole*
 Antigorite, *Brazil*, as clay mineral, 73-183; *Switzerland*, in fissured zone of serpentinite, chem., opt., X-ray, DTA data, 73-1801
 Antimony, AAS determination, 73-50; rapid NAA for simultaneous determination with As, 73-2297; *Manitoba*, arsenian, exsolved in allemontite, 73-2900
 Antimony deposits, *Austria*, geol., 73-256; *France*, stratigraphy, structure, 73-3528; *Spain*, stratigraphy, 73-3529
 Antimony minerals & compounds, As-Sb alloy, *Chile* 73-2902; complex sulphides with As, Bi, crystallochem., 73-1333; stability of stibnite, metastibnite & dissolved species, 73-3713
Antrim v. Ireland
Aomori v. Japan
Apache Warm Springs, Socorro County, New Mexico v. USA
 Apatite, As in, 73-1701; analogues, Dy₄₋₆₇(GeO₄)₃O & Ce₄₋₆₇(SiO₄)₃O, crystal structure, 73-2428; atomic-scale bases for several properties, 73-795; book, 73-1204; -calcite-dolomite mixtures, quantitative determination by X-ray diffraction, 73-2254; chem. & P fugacity in differentiated igneous intrusion, 73-792; chem., crystal chem., structure, 73-796; Cl-, problems, 73-1927; chloride ions in lattice, in natural hydroxyapatite & dental enamel, 73-794; Cl-bearing, synthetic & natural, 73-2600; fission track annealing, 73-341; fluor, crystallographic comparison of synthetic & mineral, 73-2427; monoclinic hydroxyapatite, 73-3721; IR spectra of hydroxyl ions, 73-1337; luminescence in different rock types, 73-1924; marine formation, 73-3818; role in bone fossilization, 73-4380; solid solutions of hydroxyapatite & fluorapatite, pH dependence of solubilities, 73-393, preparation & physico-chem. aspects of, 73-394; visible & near-IR spectra, 73-1066; *Belgium*, erroneous locality, 73-3239; *Colorado*, equilibrium with calcite in carbonates, 73-2928; *Czechoslovakia*, fluor-, in stream sediment, 73-1903; *Ghana*, in pegmatite, 73-1816; *India*, chlorapatite, opt., X-ray, chem. data, 73-791, radioactivity, 73-650; *Maine*, specimens, 73-4367; *Morocco*,

Apatite, (contd.)

- carbonate-, enhanced CO₂ substitution in, 73-1926; *Nevada*, in granitoid rocks, anal. data, 73-1923; *Norway*, deposits, 73-2492, hollow, in layered basic intrusion, 73-2929, potential ore, 73-3590; *Russian SFSSR*, in zoned complex, min., 73-793; *RE Sr oxy-apatite*, opt. chem. data, 73-2930; *Rwanda*, in phosphate nodules, 73-1925; *S. Dakota*, pale lavender crystals, 73-2538; *Ukraine*, copiapatite, data, 73-782
- Aplite, *California*, with high K₂O content, 73-4127
- Apophyllite, *Utah*, occurrence, IR anal., 73-4035; *Virginia*, fine crystals, 73-1095
- Appalachian Mts. v. USA*
- Appennines v. Italy*
- Apsley, Ontario v. Canada*
- Aquamarine, valuation principles, 73-466; *N. Carolina*, 73-3249, occurrences, 73-457
- Aquitaine v. France*
- Aragonite, calcite-, polymorphism, 73-3363; calcite transformation, kinetics of solid-solid reaction, 73-2594, 2595; conversion to calcite, 73-2918; equilibrium with calcite, 50°C to 150°C, 73-385; heat-treated, ESR spectra of Mn²⁺, 73-386; in speleothems, biochemical genesis, 73-478; in submarine encrustation of iron, 73-4379; manometric determination, 73-4067; sediments, textural features, 73-4296; transformation to calcite, electron diffraction study, 73-387; vein fillings in marine Mn nodules, 73-4066; *Angola*, Sr-, in hot springs, 73-4065; *New Mexico*, specimens, 73-3252
- Arbuckle Mts., Oklahoma v. USA*
- Arc plasmas, technology & use, book, 73-3358
- Arcanite, crystal structure, 73-2420
- "Archaean greenstone peridotites", 73-841
- Ardennes v. Belgium, Luxembourg*
- Ardlethan, NSW v. Australia*
- Arendal v. Norway*
- Artvedsonite v. amphibole
- Argentera, Alpi Maritime v. Italy*
- ARGENTINA, age of various rocks, relation to Gondwanaland, 73-2220; B mins. distrib., 73-303; north-west, Cainozoic volcanism, relationship to tectonic movements, 73-923; west-central, chloritized montmorillonite in Rio Chiflon formation, 73-3414; *Catamarca, Andalgalá mining district*, banded rhodochrosite, 73-2920, *Farallón Negro-Capillitas district*, age of porphyry Cu deposits, 73-1144; *La Alcaparrosa*, slavitite, crystal structure & chem. formula, 73-3497; *Pampa plains*, soil clay min., 73-2330; *Salta, Tincalayu*, kernite, data, 73-4077
- Argentite, *California*, 73-3584
- Argentoptyrite, Mössbauer parameters for Fe(II)-Fe(III), 73-3483
- Argon, excess in submarine basalts, 73-3790; use of Varian Mat GD150 in anal. for K/Ar dating, 73-1146
- Argon isotopes, activity ratios in meteorites, 73-1761
- Argonite, muds & oolites, biogeochem., 73-2715
- Argyll v. Scotland*
- Ariège v. France*
- Arizona v. USA*
- Arizpe v. Mexico*
- Arkansas v. USA*
- Arklow Head, Wicklow v. Ireland*
- Armagh v. Ireland*
- Armalcolite, Cr-Zr, in lunar fines, 73-2756
- Armenian SSR v. USSR*
- Arrojadite, *Brazil*, possible, metamict, 73-4070
- Arsenates, anal. of mean bond lengths, 73-3481; CaHAsO₄·3H₂O, crystal structure, 73-2442; Ca(H₂AsO₄)₂, crystal structure, 73-2441; CaKAsO₄·8H₂O, crystal structure, 73-2440; new crystallochemical classification, 73-2935
- Arsenic, cathode ray polarographic determination in silicate rocks and mins., 73-80; in phosphorite & apatite, 73-1701; rapid NAA for simultaneous determination with Sb, 73-2297; *Alaska*, geochem. anomalies, 73-285; *Colorado*, as indicator for mineralized volcanic pipes, 73-3858; *Japan*, in hot spring deposits & waters, 73-549; *Michigan*, in ferromanganese nodules, 73-1696; *Ontario*, geol., min. of deposits, 73-3547 to 3566; *Utah*, deposits, 73-2511
- Arsenic minerals & compounds, complex sulphides with Sb & Bi, crystallochem., 73-1333; *Chile*, As-Sb alloy, 73-2902; *Japan*, As₂S₃ in hot spring deposit, 73-549
- Arsenolite, *Manitoba*, probable, as alteration of allemontite, 73-2900
- Arsenopyrite, *New Jersey*, 73-4370; *Ontario*, anal., 73-3554; *Yugoslavia*, specimens of several habits, 73-4362
- Arsenopyrite-glauco-dot, zoning, X-ray microprobe anal., 73-760
- Arsenstruvite, crystal structure, 73-3505
- Arsikere, Mysore v. India*
- Arten, Thuringia v. Germany*
- Artinite, *California*, heat capacity at low T, & entropies, 73-3667; *Italy*, crystals, 73-1085
- Asbestos, *India*, origin of deposits, 73-1483, 1484; *Norway*, mins. in Ag deposit, 73-1824; *Pakistan*, DTA studies, 73-3639, min., 73-3637, 3641; *S. Africa*, origin of deposits, 73-3523
- Ascutney Mt., Vermont v. USA*
- Ashford, Derbyshire v. England*
- ASIA, Palaeozoic phosphate province, 73-292; central, platinoid geochem., 73-1639
- ASIA and PACIFIC OCEAN, K distribution patterns in post-Jurassic granitoids, 73-2981
- Aspen, Pitkin County, Colorado v. USA*
- Asphalt, *France*, thermal evolution & laboratory simulation, 73-548; *North America*, bibliography, 73-301
- Asthensphere, CO₂ charged, 73-2651
- Astrolite, identical with muscovite, 73-686
- Astrophyllite, chem. variation in group, 73-2813; *Russian SFSSR*, & new Zr analogue, zircophyllite, 73-2951, manganoean, 73-2930
- Atacama v. Chile*
- Atacamite, visible & near-IR spectra, 73-1066
- Atasu, Kazakhstan v. USSR*
- Atlantic City, Wyoming v. USA*
- ATLANTIC OCEAN, aeolian dust-loadings, min., 73-4263; composition of Mn nodules, 73-531; deep-sea sediments, Horizon A, & Eocene volcanism, 73-1004; Mn deposits, tr. elem. composition, 73-3756; eastern margin, Aeolian dust studies, 73-2088; north, Archaean craton, 73-3157, distribution of Zn in deep sea sediments, 73-1683; north, Hg in deep-sea sediments, 73-2697, nature of SiO₂ phases in deep sea cherts, 73-719, origin of deep sea cherts, 73-3154; south, early history, 73-4114; western continental shelf, petrol. of sand fraction of sediments, 73-1003; *Azo*, colorimetric index in petrog., 73-20
- volcanic rocks chem. anal., 73-30
- Blake Plateau*, aragonite vein fillings, Mn nodules, 73-4066; *Canary Is.*, or of collapse structures, 73-956, *G. Canaria*, peralkaline acid tendencies volcanics, 73-4212, *La Palma*, erupt. of *Teneguia*, 1971, 73-957, volcanic evolution, 73-955; *Cape Verde*, *Santiago*, olivine nodules in basaltic rocks, origin, 73-485; *Faeroe Is.*, age of volcanic ash units in peat bogs, 73-2
- magnetic anomalies, 73-2017; *Gulf Guinea*, *Ogooué delta*, formation of berthierine, smectites & glauconite sediments, 73-202; *Jan Mayen*, geochem. of alkali olivine basalts, 73-509; *Madi*, basalts, genesis, 73-2030, volcanic rock chem. anal., 73-3088, *Porto Mero*, olivine nodules in basaltic rocks, origin, 73-485; *Mid-Atlantic Ridge*, age of basalts, 73-27, gravity field, 73-3236, heat flow measurements, 73-3235, ferruginous sediments, Al, As, Hg, Mn, 73-2698, igneous rocks from drill cores, 73-2984, magnetic mins. in basalts, 73-3226, RE distribution in gabbros, 73-2681, serpentine mineralogy of ultrabasic intrusion, 73-6
- Minia Seamount & Gibbs fracture zone*, tholeiites, peridotites, gabbros, 73-41
- Rockall Bank*, age of igneous rocks, 73-2194, granulite facies metamorphic rocks, 73-1045; *Rockall Basin*, age of basalt from borehole, chem. anal., 73-1969; *Romanche Trench*, gabbro & amphibolite, petrogenesis, 73-3187; *Wal*, *Ridge*, volcanic rocks, petrog., chem. modal anal., 73-4147
- Atmosphere, evolution of Earth's, 73-4
- flux of radon from sea into, 73-553
- Atomic absorption spectroscopy, analytical scheme for Si, Al, Fe, Mg, Ca, Na, 73-48, for Li, Rb, Cs, Ba, Sr, 73-3
- buffering and standard addition technique in silicate analysis, 73-47; determination of Ag in ores, 73-33
- of Al in Fe ores, slags, etc., 73-3
- of Sb, 73-50, of thallium & indium, 2308, of Zn, 73-1164; flameless determination of Hg in soils, 73-1168
- Attapulgite v. palygorskite*
- Attock-Cherat range v. Pakistan*
- Auckland v. New Zealand*
- Augite v. pyroxene
- Aurichalcite, magnified photographs of crystals, 73-1203; *Arizona*, specimens, 73-3247, 3248; *S. Dakota*, in mine dump, unreported, 73-3649
- Austinite, *Siberia*, in Co-Ni-arsenide deposits, 73-1929
- AUSTRALIA, Archaean geochronology, 17; behaviour of Pb isotopes during granulite facies metamorphism, 73-11
- composition & evolution of deep continental crust, 73-535; central, corundum-ilmenite & corundum-spinel association, granulite facies rocks, 73-2876; soils from Holocene volcanic area, 73-3411; south-east, Corryong batholith, age, 73-18; *Warrumbungle shield*, volcanic alkaline rock lineages, 73-906
- , NEW SOUTH WALES, age of leucobearing rocks, 73-14; early Permian volcanics, phase relations in second mins., 73-1996; plagioclase-spinel intergrowths in alkali basaltic rocks, 73-28
- northeast, high-P megacrysts in alkaline lavas, 73-3073; titaniferous clinopyroxenes with hour-glass zoning, 73-40

AUSTRALIA, NEW SOUTH WALES, (contd.)

Ardlethan, Sn deposit, relation of structure & orebody type, 73-2505; *Brayton District*, stratigraphy, petrol., 73-1958; *Broken Hill*, significance of chloritoid bearing rocks, 73-1800, ironstone, geochem., 73-1654, willyamite redefined, 73-4063; *Cobar*, Cu-Pb-Zn mine, geol., 73-3611; *Coalac district*, chromite, podiform, variable chem. & phys. properties, 73-1900; *Coalac-Goobarragandra* ultramafic mass, serpentinization & metaserpentinization, 73-910; *Delegate*, clinopyroxene, in garnet-pyroxene pipe, EM anal., 73-3347; *Dinnaseer*, gabbro-troctolite-anorthosite intrusion, 73-4157; *Eden*, Devonian extrusives, eruptive history, depositional environment, 73-1995; *Ilford-Mudgee-Gulgong* region, age of basalts, 73-13; *Inverell*, tholeiites, chem., low-P fractionation, 73-4159; *Lachlan geosyncline*, Cu mineralization, geol., 73-3544; *Lightning Ridge*, inclusions in opal, 73-2636, irregular opal nodules, 73-2637; *Mitchell's Creek* or *Bodangora mine*, geol. & Au mineralization, 73-3612; *Mount Dromedary*, form of intrusive complex, 73-3074; *New England batholith*, rapakivi texture in adamellite, 73-3047, cluster anal. of rocks, 73-2308, sapphires in stream sediments, 73-453; *Pambula*, pyrophyllite, ceramic properties, 73-2540, 3646; *Sofala*, greenschist facies basic volcanics, stability relations, 73-3685; *Sydney Basin*, dawsonite, analcite in coal measures, 73-1920, gorceixite-goyazite in kaolinite rocks, 73-1090, regional heavy mineral variation, 73-996; *Tumut*, serpentinite, geol., 73-1022; *Tweed*, orogenic volcano, tholeiitic andesite of high-P origin, 73-4202; *Yeoval*, diorite complex, petrog., chem., 73-908, time differences in calc-alkaline association, 73-909

NORTHERN TERRITORY, *Nabarlek*, U mineralization age, 73-2210; *Strangways Range*, carbonatite, Sr isotopes, 73-3807, XRF tr. elem. data, 73-4158; *Woodcutters*, Pb-Zn prospect, dolomitization, genesis, 73-3609

QUEENSLAND, geol. of Duchess phosphate deposits, 73-2530; *north-east*, age of granites & volcanics, 73-1131; *Agate Creek*, agate in gravel, 73-2644; *Calcium*, metamorphosed rugose corals, 73-1010; *Cairns*, igneous rocks, age, 73-2213; *Cloncurry area*, structural setting & origin of megabreccias, 73-946; *Emufoord*, geobotanical prospecting, 73-2742; *Herberton*, geochem., geobotanical studies, 73-562, magnetic cassiterites, 73-1910, mineralogical zoning, 73-1444, 1445; *Mount Isa*, deformation on sulphide-rich layers in Pb-Zn orebodies, 73-1442, 1443, geochronology & structure, 73-1130; *Mount Morgan*, thermal metamorphism of pyritic sulphide ore, 73-3610; *Mount Samson*, trondhjemitic hornfels, 73-3152; *Mount Surprise*, topaz, 73-2645; *Surat Basin*, hydrocarbons & fatty acids in Evergreen Shale, 73-1728

SOUTH AUSTRALIA, *Beda Valley*, composition and genesis of silcretes, 73-995; *Flinders Ranges*, Pb, Zn, Cu, Ag in Lower Cambrian sediments, 73-2480; *Giles Complex*, Fe-Ti oxide mins., 73-2882; *Gosse Pile*, geol. of ultramafic intrusion, 73-3043, igneous & tectonic textures, 73-3072, K-feldspars in ultramafic intrusion, 73-2854, pyroxenes, 73-2825; *Great Artesian Basin*, celestite occurrences,

73-2521; *Pernatty lagoon*, cupriferous sediments, geochem., bacteria studies, 73-3813, S isotopes in Mt. Gunson Cu deposits, 73-3771; *Reaphook Hill*, phosphate mins., crystal structure of scholzie, 73-3502; *South Neptune I.*, "pseudorutile", data, 73-745; *Tea Tree Gulch*, huntite, heat capacity at low T, & entropies, 73-3667; *Terowie*, kimberlite occurrences, 73-3045; *Truro*, volcanic rocks, petrog., 73-3044; *Wallaway*, lamprophyric intrusions of carbonatitic affinity, 73-3046

—, TASMANIA, carboxylic acids from tasmamite, 73-3816; granitic rock types associated with Sn & Au mineralization, 73-3545; podzolic soil, role of humic acids, 73-3838; regional variation in wolframite composition, 73-3546; Se content of sulphides, 73-3764; shoshonitic association in upper Mesozoic, 73-3049; *Blue Tier batholith*, geochem. evolution of Sn-bearing granites, 73-3766; *Cleveland mine*, econ. geol., 73-1446; *Dundas, Adelaide Mine*, finest crocoite specimens, 73-1091; *Flinders I.*, Cainozoic geol., 73-3048; *Goat Island*, petrofabric anal. of deformed pebbles, 73-947; *Great Lake*, Cainozoic volcanism, petrog., chem. anal., 73-3094, dolerite, Bi geochem., 73-3791; *King I.*, scheelite-bearing skarn, origin, 73-3614; *Mt. Lyell area*, age of mineralization from fossils in limestone, 73-2214; *Noddy's Creek*, nickel-hexahydrite, 73-4073; *Orieco mine*, oxidation of Cu deposit, 73-3613

—, VICTORIA, soils from Pleistocene basalt, allophanic material in, 73-3410

—, WESTERN AUSTRALIA, apparent age & origin of black "porcelanite" of Joffre member, 73-1128; comparison of Archaean with Barberton greenstone belt, 73-842; publications of Geological Survey, combined index, 73-2303; publications of Government Chemical Laboratory, mineral & locality index, 73-2304; Wanna Beds analogous to recent North Sea sediments, 73-993; unusual eutaxitic rock in Hamersley Group, 73-989; *Albany*, Mt. Many Peaks, adamellite, & associated rocks, petrog., 73-3042; *Cooper*, geology, 73-839; *Eastern Goldfields*, Archaean layered intrusions, 73-3071, magesian rock suites, 73-1023; *Eneabba area*, geology, heavy min. concentrations, 73-992; *Eucla-Noonaera*, geol., 73-990; *Jarrahdale*, bauxites, min. anomalies, 73-1485, 3607, 3608; *Kalgoorlie*, Archaean geosynclinal sedimentation, 73-988, goldfield geol., 73-276, induced electrical polarization in serpentinite, 73-1380, metamorphic olivine in ultramafic rocks, 73-1781, structure & metamorphism of Kalgoorlie system, 73-945, wall rock alteration association with Au lodes, 73-275; *Kimberley region*, age of Halls Creek group, 73-15, lamproites, age, 73-2211; *Lake Ballard*, oval australite core, 73-241; *Londonderry*, cookeite of unusual composition, 73-2845; *Mt. Hunt*, spilitic pillow lavas, 73-905; *Mount Monger*, ultramafic, mafic & assoc. rocks, 73-1993, ultramafic rocks, primary min. & textures, 73-904; *Mount Tom Price & Mount Whaleback*, hematite ores, 73-3606; *Murra El Elevyn Cave*, biophosphammite, second occurrence, 73-797; *Naretha*, geol., 73-900; *Norseman area*, greenstones, new anal., 73-815, monoclinic pyrrhotite with magnetite lamellae,

73-2889; *Nullagine*, gaspéite, percoraite, 73-2921; *Officer Basin*, geology, 73-994; *Pilbara Block*, granite ages, 73-2212; *Pioneer*, serpentine rocks associated with Ni mineralization, petrol., 73-497; *Prince Regent & Camden Sound*, geology, 73-991; *Quairading*, Mn orthopyroxenes & garnets from metamorphosed Fe formations, 73-4000, sapphirine-bearing pyroxenites, geochem., 73-536; *Scott*, geology, 73-838; *Spargoville*, emplacement of Ni sulphide-bearing dunite, 73-903; *Talbot*, geology, 73-840; *White Well*, low-Fe cordierite in phlogopite schist, 73-3995; *Wittenoom Gorge*, paragenesis of silicates in Brockman Iron Formation, 73-681; *Yeoval*, high-K diorite, relation to andesites, 73-1994; *Yilgarn Block*, skeletal crystal forms in Archaean ultramafic rocks, 73-841, *Poona-Dalgaranga area*, age of granitic rocks, 73-16

AUSTRIA, mines & minerals, localities, 73-4361; *Bohemian massif*, age of granulites, 73-3285, pyroxene-rich garnets from Moldanubian garnet pyroxenites, chem. anal., 73-3984; *Carinthia*, Sb-W-Hg ore deposits, geol., 73-256, *Sau Alp*, metabasites, chem. in metamorphic stages, 73-3842; *Hohe Tauern*, Fe content of epidote in metamorphics, 73-2816, garnets, zoned, EM anal., 73-1794, 3988, metamorphic profile, O isotopes in mins., 73-3843; *Karawanken Mts.*, Palaeozoic spilites, petrogenesis, 73-4144; *Ostalpen*, chloritoid & staurolite genesis & paragenesis, 73-3991, pegmatites, geochem., 73-1669, *Kleinarltau & Felbertal*, ore fabrics in scheelite deposits, 73-255; *Ötztal Alps*, age of white mica porphyroblasts in schists, 73-4331; *Salzburg, Mitterburg*, U min. paragenesis, 73-254, *Ramingstein*, genesis of Ag deposit, 73-252, 253; *Steiermark*, Devonian limestone, Sr & Ba content, 73-1685; *Styria*, Neogene red soil, 73-2328; *Styria, Graz*, Pb-Zn deposits, 73-3593; *Tauernfenster*, pseudomorphs after lawsonite in greenschist, 73-3172; *Tyrol, east*, Sb-W-Hg ore deposits, geol., 73-256, *Grosskogel*, baryte-tetrahedrite mineralization, 73-1416, *Lienz*, microsyenite with brown hornblende, min., chem., 73-867, *Tux*, magnesite deposit, geol., texture, 73-4241, *Zillertal Alps*, paragonite & margarite in Greiner schiefer series, 73-4016, EM anal. of carbonates with exsolutions, 73-786; *Waldviertel igneous complex*, petrogenetic evolution, 73-866

Austvågøy, Lofoten Is. v. Norway

Autunite, NMR of water of crystallization, 73-240

Auvergne v. France

Ava v. Finland

Avalon, Newfoundland v. Canada

Avayron v. France

Aviemore, Waitaki v. New Zealand

Axinite, Devon, veins cutting Meldon aplite, 73-2823; *Italy*, large crystals, 73-4309; *Japan*, Mn-poor, 73-668; *New Zealand*, opt. properties, 73-1808

Ayshire v. Scotland

Azatek, Armenian SSR v. USSR

Azerbaijdzhan v. USSR

Azerbaijan SSR v. USSR

Azores v. Atlantic Ocean

Azov, Ukrainian SSR v. USSR

Azuay v. Ecuador

Azurite, manometric determination, 73-4067

- Bababudan Hills, Mysore v. India*
Badami, Mysore v. India
Badgastein v. Germany
Baffin I., N.W.T. v. Canada
Bagh, Rawalpindi v. Pakistan
Bahamas v. West Indies
Baie Verte, Newfoundland v. Canada
Baikal, Russian SFSR v. USSR
Bajaur v. Pakistan
Balkanite, Bulgaria, new mineral, 73-2939
Ballylig, Antrim v. Ireland
Baltic Shield v. Europe
Baluchistan v. Iran
Bamble v. Norway
Banat v. Romania
Bandanwara, Ajmer, Rajasthan v. India
 BANGLADESH, *Chittagong*, Miocene sediments, petrog., reservoir properties, 73-3827; *Dacca*, red soils, phys. studies, 73-156; *Feni area*, beneficiation of glass sand, 73-3643
Banská Hradná v. Czechoslovakia
Banská Štiavnica v. Czechoslovakia
Bar, Rajputana v. India
Baramba, Orissa v. India
Baramia, Eastern Desert v. Egypt
Barbados v. West Indies
Barberton v. S. Africa
Barbertonite, Tasmania, 73-1091
Bärenkopf, Vosges v. France
Barguzin Bay, Baikal, Russian SFSR v. USSR
 Barium, AAS & flame emission spectroscopy analytical scheme, 73-49; determination in silicates, 73-44; NAA determination in rocks and sediments, 73-75; *Austria*, in Devonian limestone, 73-1685; *India*, Ba/Rb ratios in rocks of shield, 73-504
 — minerals & compounds, $\text{Ba}_3\text{Si}_4\text{Nb}_6\text{O}_{26}$, crystal structure, 73-2370; *United Kingdom*, mining, 73-2516
Barra, Inverness-shire v. Scotland
Barrandian area, Bohemia v. Czechoslovakia
Barr-Andlau, Vosges v. France
Barysilite, New Jersey, 73-4370
 Baryte, dislocation in, 73-2161; quantitative anal. using SEM with energy dispersive X-ray analyser, 73-3350; synthesis & Ba, Sr sulphate solid solution crystals, 73-2602; *Austria*, mineralization, 73-1416; *Derbyshire*, vein in Magnesian Limestone, 73-1414; *Georgia, USA*, fluid inclusion geothermometry, 73-2520; *Georgian SSR*, in Mn deposit, 73-2518; *Germany*, Sr-containing, solubility, 73-382; *Kentucky*, deposition, 73-294; *Nottinghamshire*, as cement in sandstone, 73-4236; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341; *Sardinia*, karst concentration, 73-3533; *S. Africa*, S isotopes in, 73-475; *USSR, Kuraminskiy Mts.*, occurrences, 73-1088
 — deposits, *Appalachians*, distribution, 73-1394; *California*, prospecting, 73-3654; *India*, zoned with Cu & Pb deposits, 73-273; *Japan*, kuroko-type, S & O isotopes, 73-1645; *Poland*, min., 73-2517; *S. Africa*, origin, 73-3523; *Russian SFSR*, age relations with dykes, 73-1429; *Washington*, bedded, 73-2519
 Basalt, fractionation trends in circum-Pacific belt & stable continental regions, 73-4204; ilmenite, lunar & terrestrial, 73-602; lunar, 73-3875, 3879, 3880, 3884, 3885, 3895, 3896, cooling history, 73-2764, internal friction measurements, 73-4351, "gray mottled", 73-3890, unusual, 73-2775; magma type & geothermal environment, 73-4088; magmas & contemporaneous rhyolitic magmas, 73-3677; obsidian hydration dating, 73-30; oceanic, melting relations, 73-1524; O isotope thermometry, 73-3789; phase relations in melting range, 73-3681; *RE* in abyssal & plateau, 73-511; source rock of magmas, analytical approach, 73-3682; submarine, excess Ar in, 73-3790, O isotopes in fresh & weathered, 73-2719; volatile & siderophile elems. in, comparison with lunar rocks, 73-595; *Antarctica*, Sr isotope ratios in, & in ultramafic nodules, 73-516; *Canada*, geochem., 73-508; *Germany*, alkali, origin of fassaitic augite in, 73-4143; *India*, chem., 73-517, columnar, magnetic grains in, 73-1076, Deccan Trap occurrence, 73-894, differentiation & pyroxene relations, 73-3794, fenitization, 73-4315, impact crater in, 73-3976, relationship of chem & min., 73-897, trace elems. in, 73-3794; *Jan Mayen*, geochem. of alkali olivine, 73-509; *Japan*, geosynclinal, *RE* in 73-510, petrochem., 73-901, spilitic, authigenic mins., 73-1992; *Kurile Is.*, chem. of gases in, 73-2736; *Madeira*, genesis, 73-2030; *Mid-Atlantic Ridge*, age, 73-27; *New Caledonia*, age, 73-1136; *New South Wales*, age, 73-13; *New Zealand*, petrog., 73-2059; *Nigeria*, alkali, origin of feldspar megacrysts in, 73-871, 3034; *Pacific Ocean*, crystal fractionation model, 73-2036, modal anal., 73-2988, Sr isotopes, 73-1674; *Rockall Bank*, age, 73-2194; *Rockall basin*, chem. anal., 73-1969; *Scotland*, intrusive dykes showing flow lineation, 73-859; *Sweden*, age, 73-2192; *West Indies*, new anal., 73-2008, origin, differentiation, 73-2009
 Basalt-trachyte-phonolite series, *Marquesas Is.*, 73-4172
 Basaltic glass, S valency in, 73-1673
 Basaltoids, geosynclinal, original chem. composition, 73-2677; weathering of, supergene leaching of detrital zircon, 73-2705
 Base metal mineralization, geochem. dispersion from in glaciated terrain, 73-2308
 Base metal mines, *Ireland*, Pb, S isotopes, 73-1629
 Base metal ores, fusion method for XRF, 73-1178
Basin & Range plutons v. USA
Bas-Limousin v. France
Bastar, Madhya Pradesh v. India
 Bastnäsite, *Burundi*, ore, petrog., 73-2536; *California*, 244Pu in, 73-488, *RE* source in orebody, 73-3655; *Japan*, from altered allanite, chem. anal., 73-790; *Ontario*, after allanite, 73-2923
Batère, Pyrénées-Orientale v. France
Bates County, Missouri v. USA
Bathurst, New Brunswick v. Canada
Bathurst, Nova Scotia v. Canada
Batumi, Gruzinskaya SSR v. USSR
Bau, Sarawak v. Malaysia
Bauchite, Nigeria, petrog., chem., min., 73-872
 Baumhauerite, *Peru*, in X-ray amorphous mass, 73-2906, Ti-bearing, X-ray amorphous equivalent, 73-4061
 Bauxite, formation, 73-1659; *Brazil*, deposits, 73-1407; *Chile*, geol., min., chem., 73-1490; *France*, karstic, origin, 73-300, min., 73-752; *Guyana*, extraction, properties, applications of calcined, 73-299; *Kazakhstan*, development indicated by clay min., 73-1481; *N. Ireland*, for road surfacing, 73-298; *Pakistan*, 73-23 circular thin-layer chromatography qualitative anal., 73-3341, *DTA* study, 73-3639; *Russian SFSR*, origin, 73-27 *Sardinia*, karst concentration, 73-35 *Washington*, resources, 73-3647; *W. A. Italia*, min. anomalies, 73-1485, 363608
Bavaria v. Germany
Bavenite, Poland, rich occurrence, 73-660
Bay of Islands, Newfoundland v. Canada
 Bayerite, free energy of formation & aqueous solubilities, 73-1548
Bear Lake, Quebec v. Canada
Beardmore Glacier v. Antarctica
Beaver County, Utah v. USA
 Bequerelite, *Katanga*, in Sorbonne collection, 73-3266
Beda Valley, S. Australia v. Australia
Bedford, Indiana v. USA
 Beegerite, *Colorado*, schirmerite identification, 73-2893
 Beidellite v. smectites
Beistatfjorden, Trøndelag v. Norway
 BELGIUM, cone-in-cone concretions, carbonate composition, 73-2916; *Givetian*, reef facies, dolomitization & mineralization, 73-251; loess, clay min., 73-343 south, clay min. of soils from Dinantian limestones, 73-1238; *Ardenne*, *Rocher massif*, microgranites, petrog., 73-410 *Stavelot*, low-grade metamorphic pelitic rocks, min., 73-4327; *Campine*, Permian, Trias, argillaceous & heavy mins., 73-3438; *Hainaut*, *Blaton*, bedded silicite, petrog., 73-4238, *Ciply*, apatite erroneously reported, 73-3239; *Lomme valley*, distribution of Cu in sediments, 73-381 *Namur*, *Denée*, celestine, X-ray powder data, 73-2911; *Vliermaal*, sands, sedimentary petrog., 73-4237
Belley, Ain v. France
Belozerká, Russian SFSR v. USSR
Ben Lomond Mt., California v. USA
Benfontein v. S. Africa
 Benitoite, *California*, chem., phys., optical structural properties, 73-659
Bennett Lake, Yukon v. Canada
 Bentonite, synthesis at room temperature, 73-3719
 Bentonites, thin slabs, X-ray radiography of, 73-3316; Ti as free oxide & substitute forms in, 73-145; *Alaska*, cristobalite clinoptilolite in, 73-4029; *England*, *Re variety*, description, origin, 73-123 min. origin., 73-1235; *Greece*, rheology props., 73-1244; *Indiana*, Middle Devonian marker bed, min., 73-3416; *Iowa*, Ordovician potassium, 73-2332, *Missouri*, K min., 73-3426; *Oklahoma*, resource, 73-1366, 1367; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341; *Sardinia*, composition, chem. anal., 73-1243; *Yugoslavia*, min., chem., 73-195.
Berber, Northern Province v. Sudan Republic
Berea, Virginia v. USA
Beresford Lake, Manitoba v. Canada
Bergell massif v. Switzerland
 BERING SEA, sedimentary Au deposits, 73-1451
Beris, Kharga Oasis v. Egypt
Berkshire Valley, New Jersey v. USA
Bernic Lake, Manitoba v. Canada
 Berryite, *British Columbia*, EM anal., 73-2896; *USSR*, 73-1945
 Berthierite, *Gulf of Guinea*, formation in sediments, 73-202
 Berthierite, *New Jersey*, 73-4370

- ertossaita, *Rwanda*, in phosphate nodules, 73-1925
- ertrandite, *Mexico*, in fluorite deposit, 73-293; *New Mexico*, 73-3586
- eryl, alteration in pegmatites, 73-290; crystal chem., 73-2822; crystal growth at High *P*, 73-1619; crystallization from solid-solid reactions, 73-408; stability in aqueous solutions, 73-1590; *Ghana*, in pegmatite, 73-1816; *India*, in pegmatite, chem., 73-663; *Maine*, 73-4367; *Manitoba*, caesian, 73-2872; *Michigan*, 73-1102; *N Carolina*, occurrences, 73-457; *S Dakota*, 73-2538
- eryllium, determination in silicate rocks, 73-55; in deep-seated crustal rocks, 73-3757; in lunar fines & crystalline rocks, 73-3923; *New Mexico*, geol. of deposits, 73-3586, resources, 73-3587; *Swiss Alps*, distribution in various rocks, 73-3531
- eryllium minerals & compounds, Be_2SiO_4 , anharmonicity of IR vibration modes, 73-2364; orthofluoroberyllates, crystallography, 73-2447
- eryllsilicate, & with gismondine structure, synthesis, 73-3733
- etektinitite, *Japan*, min., 73-1877; *Poland*, in ores, 73-3535
- etts Cove, *Newfoundland v. Canada*
- handara, *Andhra Pradesh v. India*
- hinai, *Rajasthan v. India*
- ianchite, *New Jersey*, 73-4370
- ideauxite, new mineral, 73-1935
- ighorn Mts., *Wyoming v. USA*
- ihar v. *India*
- ingham, *Utah v. USA*
- innite, possible formula, 73-772
- innital v. *Switzerland*
- iogeochemical prospecting, 73-561, 2742
- iotite v. mica
- iphosphammite, *W. Australia*, second occurrence, first *in situ*, 73-797
- irch Lake, *Ontario v. Canada*
- Birch's Law, 73-1067
- Bird River, *Manitoba v. Canada*
- Birnessite, *Mexico*, 73-2184
- Bisbee, *Arizona v. USA*
- Bisbeeite, ill-defined species, 73-1823
- Bismuth, in stony meteorites & standard rocks, 73-1764; magmatic geochem., 73-3791; NAA determination in rocks, 73-77
- Bismuth minerals & compounds, complex sulphides with As, Sb, crystallochem., 73-1333; *Africa*, new mins. in pegmatites, 73-1946; *Kazakhstan & Russian SFSR*, new Bi-sulphides of Ag, Pb, Cu, 73-1945; *Russian SFSR*, sulphotellurides, EM anal., X-ray, reflectivity & VHN data, 73-1890
- Bismuthinite, microhardness values, 73-2903; *S. Dakota*, in mine dump, unreported, 73-3649; *USSR*, 73-1945
- Bismutite, *S. Dakota*, in mine dump, unreported, 73-3649
- Bitumens, *Derbyshire*, associated with Pb-Zn-fluorite ore mins., 73-3777
- Bixbyite, sitaparite, *India*, in Mn ores, 73-4047
- Bjerkrem v. *Norway*
- Black Forest v. *Germany*
- Black Hills, *S. Dakota v. USA*
- Black River Falls, *Wisconsin v. USA*
- Blaine County, *Idaho v. USA*
- Blake Plateau v. *Atlantic Ocean*
- Blanco Mt., *California v. USA*
- Blanský les, *Bohemia v. Czechoslovakia*
- Blastomylonites, classification, 73-4326; review, 73-2133
- Blaton, *Hainault v. Belgium*
- Bleikvassli v. *Norway*
- Bluebell mine, *B.C. v. Canada*
- Blue Tier batholith, *Tasmania v. Australia*
- Boborema v. *Brazil*
- Bodensee v. *Germany*
- Boehmite, & gibbsite, stability, 73-3380; ferriferous, structure problems, 73-4048; free energy of formation & aqueous solubility, 73-1548; *Sri-Lanka*, natural single crystals, 73-2884
- Bodie, *California v. USA*
- Bohdanowiczite, supplementary data, 73-2940
- Bohemia v. *Czechoslovakia*
- Bohemian Massif v. *Austria, Czechoslovakia, Europe*
- Boléite, crystal structure, 73-2449
- Boleslawice, *Lower Silesia v. Poland*
- BOLIVIA, tin-silver province, 73-289; Calacalani, hydrotungstite, refinement of X-ray data, 73-749; *Llallagua*, previously reported mineral possibly tetrawickmanite on wickmanite, 73-2949; *Uncia*, alluvial tin deposit, evaluation from drill-core, 73-3517
- Bolzano v. *Italy*
- Bombay, *Maharashtra v. India*
- Bon Accord, *Barberton v. S. Africa*
- Bonnemain, *Ille-et-Vilaine v. France*
- Boracite, synthetic, penetration twins, 73-1279
- Borates, Al & Ga, indexed X-ray powder data, cell parameters, 73-1553; determination in borosilicate glasses, 73-3340
- Borate deposits, *California*, mineral guide, 73-4376
- Borax, visible & near-IR spectra, 73-1066
- Boreholes, activation anal., 73-3354
- Bornite, colour related to quality of polished surface, 73-2898; Mössbauer parameters for Fe(II), 73-3483; *Bushveld Igneous Complex*, 73-756; *Virginia*, 73-1095
- Bornite, *Alaska v. USA*
- Boron, isotopic abundance in lunar rocks, 73-3922; minerals & deposits, 73-1471; minerals, economic, uses & distribution, 73-303; rapid determination in silicates, 73-57; rapid estimation of B_2O_3 in silicate materials, 73-1166; -salinity, relation to clay min. in modern deltas, 73-2733; *England*, in Namurian shales, 73-523
- Boron-melilite, thermal transformation of datolite to, 73-3730
- Börzsöny Mts. v. *Hungary*
- Boston, *Massachusetts v. USA*
- Bouches-du-Rhône v. *France*
- Boulangerite, *California*, 73-4372; *Yugoslavia*, 73-4362
- Boulder County, *Colorado v. USA*
- Bournac, *Haute-Loire v. France*
- Bournonite, crystal structure, 73-1332; microhardness values, 73-2903; *Peru*, paragenesis, 73-4061; *Yugoslavia*, specimens, 73-4362
- Boussingaultite, *California*, 73-4375
- Brackebuschite, compared with new mineral heyite, 73-2944
- Bradshaw Mts., *Arizona v. USA*
- Bragança v. *Portugal*
- Braggite, *Bushveld Complex*, 73-756
- Brannockite, *N. Carolina*, new tin min., 73-4078
- Bravoite, pyrite-, zoned min., X-ray microprobe anal., 73-760; thermochemical stability, 73-1561; *Bushveld Complex*, 73-756; *Poland*, in ores, 73-3535
- Bray Head, *Wicklow v. Ireland*
- Brayton District, *NSW v. Australia*
- BRAZIL, agate, photographic study, 73-1149; ballas diamonds, microstructure, 73-2627; *Amazon R.*, water chem., 73-1711; *Bahia*, beryl, crystal chem., 73-2822, *Boborema*, metamict phosphate, 73-4070; *Ceara, Pedra Verde*, metamorphosed Cu deposit, 73-1469; *Fortaleza City*, phonolites, chem. anal., 73-3806; *Jacoba talc mine*, antigorite as clay mineral, 73-183; *Jaraguá*, plagioclase, chem. changes in amphibolite, 73-2858; *Minas Gerais, Alegria district*, geol., ore deposits, 73-1407, *Itinga*, gem quality chondro-eosphorite, 73-459; *Paraíba Basin*, origin of mineralized water in Precambrian rocks, 73-1724; *Sergipe*, tachyhydrite, 73-2937; *Ouro Preto*, origin of topaz deposits, 73-1799, 2811, 2812; *Serra dos Carajás*, Fe deposits, 73-1470
- Breccia, *Ontario*, downward intrusive, 73-3132; *Poland*, in stratified Pb-Zn deposits, 73-3536; *W. Australia*, eutaxitic, 73-989
- Breccia pipes, *Chile*, Cu-bearing tourmaline, geol. min., fluid inclusion studies, 73-1408, 1409, origin, 3589
- Bredigite, crystal structure, 73-2363; experimental work, 73-2607
- Breithauptite, *Ontario*, anal., 73-3554
- Brewsterite, *Russian SSR*, first find in *USSR*, 73-2873
- Briartite, synthesis & polymorphism, 73-2592; *S.W. Africa*, phys. data, EM anal., 73-4058
- Bricks, from Neger clays, min., 73-2619
- Brines, *California*, estimated potential, 73-1404; *Enderbury I.*, chem. composition of lake, 73-1715; *Red Sea*, new holes, 73-3524; *Trucial Coast*, geochem., & coexisting evaporites, 73-3851; *Turkmenia*, migration of Pb & Zn in, 73-1720, 1721
- Bristol Channel v. *British Isles*
- Britholite, in differentiated igneous intrusions, EM anal., 73-792; synthetic, IR absorption spectra, 73-407
- British Columbia v. *Canada*
- BRITISH ISLES, Carboniferous & Permian Triassic rocks, *in situ* density measurements, 73-4348; fragmentation in Tertiary igneous province, 73-4181; K/Ar ages of Tertiary igneous rocks, 73-3279; Lower Permian rocks, 73-978; regional variation in composition of Caledonian granites, 73-500; road materials & quarrying, 73-1474; Ti, Zr & Cr in some pillow lavas, & petrogenetic affinities, 73-2673; *Bristol Channel*, gravity survey, geol., 73-4102; *Isle of Man*, gravity survey, 73-1953; also v. *England, Ireland, Scotland, Wales*
- Brittany v. *France*
- Broadlands v. *New Zealand*
- Brochantite, *Arizona*, DTA curves, 73-1931; *Greece*, opt. X-ray, DTA data, 73-1931; *New Jersey*, 73-4370
- Broken Hill, *NSW v. Australia*
- Bromine, photometric micro-determination in silicate rocks, 73-59
- Bronzite v. pyroxene
- Bronzite, elasticity, anisotropy, 73-3218
- Brooks Range, *Alaska v. USA*
- Brookville, *New Jersey v. USA*
- Brown Derby, *Gunnison County, Colorado v. USA*
- Bruce peninsula, *Ontario v. Canada*
- Brucite, *California*, from natural cold alkaline spring gel, 73-751
- Brugnatellite, *Italy*, crystals, 73-1085
- Bruncite, *Poland*, colloidal transport phenomena, 73-1419
- Brunogeierite, new mineral, 73-805

Brushite, *Sarawak*, in cave guano, 73-800
 Buchite, *Ireland*, osumilite in, 73-3996
 Bude, *Cornwall v. England*
 Buell Park, *Arizona v. USA*
 Buffalo, *S. Carolina v. USA*
 Bug R. v. *Poland*
 Building stones, *Israel*, book, 73-3365;
Switzerland, historic, 73-3631; *Washington*, 73-3648
 Buktusu r. *Uganda*
 Bulfontein v. *South Africa*
 BULGARIA, Gramatikovo orefield, flotation
 of poor Cu-Zn ore, 73-3595; *Madan*,
 Mogilata, natural galena whiskers, 73-
 326; Sedmochislenitsi mine, new mineral,
 bakanite, 73-2939
 Bumpass Cove, *Tennessee v. USA*
 Buranga r. *Rwanda*
 Burlington Peninsula, *Newfoundland v.*
Canada
 BURMA, radiocarbon ages of archaeological
 material, 73-1135; simple field determina-
 tion of Cu, 73-3330; Sn, W deposits,
 review, 73-274; Yinmabin-Monywa-Myin-
 mu region, magnetic & photogeol. survey,
 73-4354
 Burpala, *Baikal, Russian SFSR v. USSR*
 BURUNDI, Karonge, bastnäsite ore, petrog.,
 73-2536
 Burwash Creek, *Yukon v. Canada*
 Busheld Complex v. *South Africa*
 Bütschli, growth in alkali carbonate
 solutions, 73-2596
 Butte, *Montana v. USA*
 Bygland v. *Norway*
 Byrd Station v. *Antarctica*
 Byssolite, *Virginia*, 73-1095
 Bystrzyca Mts., *Sudetes v. Poland*
 Bytownite r. feldspar

Cadmium. NAA determination in rocks,
 73-77

Cadmium minerals & compounds.
 $\text{Cd}_3(\text{PO}_4)_2\text{Cl}$, crystal structure, 73-3503,
 3504; Cds, crystal growth, 73-335;
 disarcion in crystal growth, 73-327

Caernarvon v. *Wales*

Caesium, AAS & flame emission spectro-
 scopy analytical scheme, 73-49; mode of
 concentration, 73-2539; *S. Dakota*, re-
 serves in mine dump, 73-3649

Caesium isotopes, radioactive, rapid deter-
 mination in water, 73-1171

Cahnite, *New Jersey*, 73-4370

Cairns, *Queensland v. Australia*

Calabona, *Sardinia v. Italy*

Calabria v. *Italy*

Calacalani v. *Bolivia*

Calanda, *Graubünden v. Switzerland*

Calaverite, *Fiji*, 73-3615

Calcareous materials, determination of Pb,
 73-2272

Calcareous rocks, *California*, in roof pen-
 dants, metamorphism, 73-4304

Calc-alkaline intrusive rocks, biotites in,
 73-4009

Calc-alkaline suite, *Grenada*, unusual differ-
 entiation trend, 73-4170

Calcite, -aragonite polymorphism, 73-3363;
 -aragonite transformation, kinetics of
 solid-solid reaction, 73-2594, 2595; asso-
 ciated with spurrite, determination by
 DTA, 73-2265; conversion from aragonite,
 73-2918; crystal growth in gels, 73-1573;
 determination in carbonate sample using
 air-comparison pycnometer, 73-3306;
 -dolomite-apatite mixtures, quantitative
 determination by X-ray diffraction, 73-
 2254; equilibrium with aragonite, 50°C

to 150°C, 73-385; experimentally replacing
 SiO_2 in diatoms, 73-351; form of Sr
 occurrence in, 73-489; high-Mg, role in
 texture of aragonite sediments, 73-4296;
 hydrothermal growth from alkali car-
 bonate solutions, 73-2596; in *Inoceramus*
 shells, 73-785; in reaction dolomite +
 quartz + water = talc + calcite + carbon
 dioxide, 73-1521; in speleothems, bio-
 chemical genesis, 73-478; lattice dynamics
 of crystals, 73-3499; luminescence, 73-
 3206; manometric determination, 73-
 4067; Mg content, crystal habit in
 septarian veins, 73-2917; orientation in
 deformed rocks, 73-1520; plasticity of
 crystals, 73-2159; + phlogopite + quartz
 = tremolite + K-feldspar + H_2O + CO_2 ,
 73-2614; preparation of single crystals by
 solvent zone melting, 73-1574; primary
 rhombic in sedimentary carbonates,
 73-4225; quantitative gasometric deter-
 mination in rocks, 73-1172; transforma-
 tion from aragonite, electron diffraction
 study, 73-387; with primary analcite in
 phonolite, 73-3032; *Austria*, with exsolved
 ankerite, 73-786; *Belgium*, cone-in-cone
 concretions, 73-2916; *Canada*, fibrous,
 stratigraphic marker, 73-4269; *Czecho-*
slovakia, C & O isotopes in, 73-1691;
Egypt, bands in "alabaster", geochem.,
 73-1916, biaxial, 73-2915; *Germany*, high-
 Mg, in Lower Miocene, 73-784, in
 lamprophyres, 73-677, O & C isotope
 content, 73-1690; *Iowa*, behaviour in
 limestone weathering, 73-1693; *Italy*,
 specimens, 73-3240; *Japan*, lattice con-
 stants in marble, 73-783; *New Jersey*,
 pseudo-octahedral habit, 73-3242; *New*
York, cone-in-cone concretions, 73-4276;
Pakistan, DTA studies, 73-3639; *Poland*,
 deposits in karst, 73-4242; *W. Virginia*,
 new structure, 73-1915; *Yugoslavia*,
 specimens, 73-4362

Calcium. *Queensland v. Australia*

Calcium, AAS analytical scheme, 73-48;
 determination by compleximetric titra-
 tions, 73-54; X-ray spectrographic anal. in
 silicate rocks, 73-66

Calcium minerals & compounds, carbonate,
 partial molal volume in sea-water,
 73-384; carbonate monohydrate in sea-
 water, 73-388; chloraluminate, stability,
 73-2604; fluoride, anisotropy in hardness
 & friction of crystals, 73-3212; hydrated
 sulphates, IR spectrophotometric studies,
 73-3494; iodide, growth & dissolution
 of crystals, 73-1577; sulphosilicate, in
 lime-kiln wall coating, opt. chem.,
 X-ray data, 73-396; CaSiO_4 , stabilization
 of verneuil boules, 73-3676

Calcretes, formation, 73-4262; nature of,
 73-2307

Caledonia County, *Vermont v. USA*

Caledonides, metamorphic, dating events,
 73-1116

Caledonite, *New Mexico*, specimens, 73-3252

Caliche, *California*, deposits, 73-3656; *New*
Mexico, clay min., 73-1260; *New Mexico*
 & *Texas*, origin, classification geol.,
 chem. anal., 73-1486, 1487

Calico, *California v. USA*

California v. USA

Callander Bay, *Ontario v. Canada*

Calorimeters, for heats of solution & low-T
 heat capacity measurements, 73-1491

CAMBODIA, *Pailin*, age of gem deposit,
 recent tectonics, 73-3290

Camden Sound, *W. Australia v. Australia*

Campania v. Italy

Camperio v. *Switzerland*

Campine v. Belgium

Campo Benio v. Switzerland

Campsie Fells, Stirling v. Scotland

Camsell R., Great Bear Lake, N.W.T.
Canada

CANADA, Archaean Ni sulphide deposits,
 73-281; catalogue of minerals, 73-109;
 comparison of U deposits with *E. Europe*,
 73-277; Li distribution in granitoid rock,
 73-3792; Precambrian volcanogenic ma-
 gmatic sulphide deposits, review, 73-1

radiocarbon dates on archaeological
 samples, techniques, 73-3292; Rb,
 isochron age studies, 73-1139; serpentine
 mineralogy of ultrabasic intrusions, 73-
 696; structure, composition of deep crust
 and upper mantle, 73-846; titaniferous
 magnetite, ferride elem. content, 73-281;
 variations in tectonic styles, 73-196

Abitibi area, geochemical evaluation of,
 Cu & Zn potential, 73-284, relation to
 structural lineaments and min. occur-
 rences, 73-845; *Arctic*, regional magne-
 tism anomalies, 73-4117; *Canadian Cordillera*,
 metamorphic map, 73-844, plate tectonic
 evolution, 73-2998; *Canadian Shield*, evolution
 of, early Proterozoic continental margin,
 73-3157, geochem. evolutionary trends,
 73-470, Hg in Precambrian shales, 73-1682,
 integrated model for Pb isotope evolu-
 tion, 73-3295, metallogenic patterns &
 evolution, 73-278, revised Precambrian
 time scale, 73-2225, *Grenville Province*,
 bimetasomatic reaction zones in granulite
 facies, 73-4316, mineral resources apprais-
 al, 73-1384, north-east, correlation of
 major Aphebian rock units, 73-2225

north-west, reconnaissance geochem. us-
 ing lake sediments, 73-3862; *Frontenac*,
 palaeomagnetism, 73-3224; *Gulf of*

Lawrence, *Magdalen Is.*, geophysical
 survey, 73-4121; *Hudson Bay*, age of
 metamorphosed sediments, 73-2225;
 volcanic & sedimentary rocks, 73-2225

evolution of Precambrian banded Fe
 formations, 73-2232, palaeoigneous
 anomalies, concentration of metals also
 it, 73-280; west, Precambrian basement
 crustal evolution, 73-4196

ALBERTA, hydrocarbons in gas con-
 denses, 73-1729; magnetotelluric data,
 73-3229; north-east, geochronology
 of *Canadian Shield*, 73-2226; *Leduc*, crustal
 model, 73-3232

BRITISH COLUMBIA, biogeochem. pro-
 specting for Cu, 73-565; south-east, Pb
 deposits, geol., 73-3568; south-west, che-
 & jaspers, petrol., 73-4270; *Adamant Mt.*,
 petrol. of pluton, 73-914; *Albert Canyon*,
 geol. of metamorphic complex, 73-434

Bluebell Mine, fluid inclusion & isotope
 studies in Pb-Zn deposits, 73-1635; *Car-*
Flats, gypsum karst, geomorphology
 geochem., 73-3833; *Cassiar*, age of
 Mo-W, mineralization, 73-2228; *Coe*,
 Mts., geochem. drainage survey, 73-277;
 geothermal data, 73-4358, K, Rb,
 contents of batholith, 73-1666; *Craigmont*,
 Cu deposit, source, age, 73-1650, 1651

Eagle granodiorite, age, 73-2229; *Espe-*
ade Range, hornblende-plagioclase bearing
 rocks, plagioclase-garnet-epidote equi-

bria, 73-3189; *Grand Forks*, amphibolite
 major & tr. elem. anal., 73-2146, struc-
 ture & petrol., 73-1032; *Hedley*, age of
 igneous rocks, 73-2230; *Hope*, two-phase
 Cr-bearing spinels, 73-2878; *Houston*,
 berrylite, EM anal., 73-2896; *Nelson*,
 batholith & *Kootenay arc*, Pb isotope
 abundances, 73-495; *Okanagan Valley*,
 73-281

CANADA, BRITISH COLUMBIA, (cont.)

mylonitic rocks & flattened garnets, 73-3188; *Revelstoke*, stannite-kesterite exsolution, 73-2897; *Rogers Pass*, almandine garnet isograd, 73-2147; *Saanich Inlet*, early diagenesis in reducing fjord, 73-1677, 1678, 1679; *South Cariboo*, dolerite plugs, petrol., 73-4198; *Texada I*, age of Cu, Fe deposits, 73-28; *Thor-Odin gneiss dome*, petrol., structure, 73-1033; *Vancouver I.*, age of Cu, Fe deposits, 73-28, palaeomagnetism, 73-1078, plutonic rocks, petrog., chem., age & emplacement, 73-4197, tectonics & depositional history of continental margin, 73-3004, *Western Mines*, chalcopryite, crystal structure, 73-3486; *Ware*, tectonic overprinting, 73-3005; *White Creek batholith*, zoning, origin & significance, 73-915

, MANITOBA, south-east, pegmatites, description, 73-2038; *Bird River mines*, nickeliferous smythite, 73-2891; *Bernic Lake*, Tanco pegmatite, Canadian Mineralogist, special issue, 73-2302, geol. paragenesis, 73-3051, amblygonite-montebrazite, 73-2931, eucryptite, 73-2869, K-feldspars, coloured, 73-2853, micas, Li-Rb-Cs, 73-2838, petalite & spodumene relations, 73-2831, secondary mins. from spodumene rich zones, 73-2872, tantalum ore mins., data, 73-2888; *Charron Lake*, Archaean pseudotachylite, 73-3006; *Elbow Lake*, zoned plagioclases, 73-2855; *Flin Flon*, multistage history for Pb, 73-3293; *Flin Flon-Snow Lake*, age of ore formation, 73-2234; *Flin Flon-Thompson*, rock, min. specimens, 73-1093; *Greer Lake*, minerals in pegmatite, 73-3241; *Huron Claim*, mins. in pegmatite, 73-3241; *Odd West pegmatite*, alledmontite & alteration products, 73-2900; *Rice Lake-Beresford Lake area*, NAA of Au, 73-1385; *Shatford Lake*, mins. in pegmatite, 73-3241

, NEW BRUNSWICK, Devonian batholiths, implication of contrasts, 73-2037; metalization related to tectonic evolution, 73-3567; origin of massive sulphide deposits, 73-2484; south, Appalachian structural style, 73-3009; *Bathurst*, deformation of sulphide deposit, 73-3616; *Chaleur Bay*, zeolite facies metamorphism, 73-3191

, NEWFOUNDLAND, glauconite in sediments of continental shelf as bedrock indicator, 73-4271; low-K tholeiites, 73-3078; north-east, Gander Lake & Davidville groups, new data, 73-3002; west, mafic ultramafic complexes, tectonics, 73-4163; *Avalon Peninsula*, late Precambrian time span, 73-2223, late Precambrian volcanic island complex, 73-3077, Precambrian metasomatism, 73-4162, spilite-keratophyre province, 73-4120; *Baie Verte*, cuprospinel, new min., & other spinels, 73-2941; *Bay of Islands*, sheeted dykes, brecciated dyke rocks in transported igneous complexes, 73-3003; *Betts Cove*, ophiolite complex, petrol., 73-1947; *Burlington Peninsula*, ultramafic rocks, petrol., 73-4160; *Gullbridge*, Cu deposit geol., 73-3193; *Notre Dame Bay*, basaltic dyke swarms, 73-1999; *St. John's*, detrital garnet & muscovite in late Precambrian sandstones, 73-3131, Precambrian sediments, burial metamorphism, 73-4302; *White Bay*, Lower Palaeozoic geol., rheo-igneimbrite, 73-4161

, NEWFOUNDLAND, LABRADOR, cordierite-sillimanite rocks, min., textures, 73-1009;

coast, palaeomagnetism of igneous rocks, 73-3227; *Joan Lake*, agpaitic complex, arfvedsonite & aegirine-augite, Mössbauer spectra, 73-226; *Kaipokok Bay*, Precambrian gneisses & supracrustal rocks, 73-3192; *Mealy Mts.*, age of basaltic dykes, 73-3296; *Michael gabbro*, palaeomagnetism, 73-4355; *Mistatin Lake*, geology of crater, 73-848

—, NORTH-WEST TERRITORIES, mineral exploration summary, 1966 to 1968, 73-279; *Baffin Bay*, geophys., studies, geotectonic implications, 73-3000; *Baffin I.*, dolerite dykes, palaeomagnetism, 73-4356, lapis lazuli, 73-1856; *Coppermine R.*, geochem. exploration in permafrost terrain, 73-566, 567, geochem. of basalts, 73-508, mineral exploration, 73-279; *Coronation sills*, petrol., palaeomagnetism, 73-2999; *Darvile Bay*, magnetic measurements, 73-3221; *District of Mackenzie*, fibrous calcite, stratigraphic marker, 73-4269, graded echinoderm debris beds, 73-4268; *Echo Bay*, geol., geochronology, 73-2481; *Echo Bay mine*, mckinstryite, phys., chem., crystall. props., 73-1886; *Ellesmere I.*, north-east, geol. of Lower Palaeozoic formations, 73-3129; *Great Bear Lake*, *Camsell R.-Conjuror Bay area*, geol., 73-4118; *Great Slave Lake*, palaeomagnetism of red beds & diabase, 73-3225; Proterozoic Seton formation, petrog., 73-2997; *Kaminak Lake*, Hg occurrence & distrib., 73-545; *MacKenzie River Basin*, hydrogeochemistry of surface water, 73-1709, 1710, 2732, 2733; *Pine Point*, direction of flow of mineralizing solutions, 73-2506; *Somerset I.*, co-existing pyroxenes in granulite-facies gneisses, 73-2826, kimberlite, petrol., 73-3076; *Western channel diabase*, palaeomagnetism, 73-3223; *Yellowknife*, sedimentology of Archaean turbidites, 73-3130; *Yellowknife-Beaulieu region*, gedrite from greywacke, 73-2834

—, NOVA SCOTIA, U in stream sediments in Carboniferous, 73-554; *Bathurst*, origin of massive sulphide deposits, 73-1453; *Cape Breton I.*, granite ages, 73-2224; igneous & tectonic events, 73-4122; *Tombstone stock*, petrog., 73-4164

—, ONTARIO, Sibley group sediments, pole position, 73-4357; *Apsley gneiss*, origin, 73-2720; *Birch-Uchi Lakes*, bedrock geochem., 73-2308; *Blind River-Elliott Lake*, palaeomagnetism of Nipissing diabase, 73-1078; *Bruce Peninsula*, spherulite concretions, 73-2663; *Callander Bay*, alkaline carbonatite complex, geol., petrol., 73-1998; fenitization in mafic rocks, 73-4306; *Chalk River*, *Perch Lake area*, biogeochem. exploration, 73-569; *Cobalt*, endogenic haloes of native Ag deposits, 73-2308, geochem., biogeochem. exploration methods, 73-571; *Cobalt-Gowganda region*, Ag-As deposits, geol., min., 73-3547 to 3566; *Deloro*, genesis of magnesite deposit, 73-2522; *Dungan Township*, nepheline, crystal structure, 73-1312; *Elbow Lake*, amethyst clusters, 73-456; *Fishtail Lake*, cordierite-gedrite rocks & gneisses, petrog., min., 73-4305; *Hutchinson Township*, nickeliferous smythite, 73-2891; *Kakagi Lake*, salic pyroclastics, nature & origin, 73-4216; *Lake Huron*, downward intrusive breccias in Espanola formation, 73-3132; *Lake Ontario*, Hg in sediments, 73-2695; *Lake St. Joseph*, behaviour of Archaean granite batholith, 73-3194, 3195; *Lake*

Superior, palaeomagnetism of Keweenaw rocks, 73-2166, Quaternary sediments, stratig., min., tr. elem. concentrations, 73-2694, structure, stratigraphy of Precambrian, 73-4119; *Lake Superior*, *Thunder Bay*, Holocene sediments, Fe & Mn-rich layers in, 73-3822; *Ottawa*, quick clay, microstructure, 73-1267; *Ottawa-Peterborough, Ottawa-North Bay*, rock, min. specimens, 73-1093; *Port Talbot*, weathered interstitial green clay, 73-2334; *Rough Rock Lake*, bastnäsite after allanite, 73-2923; *St. Lawrence R.*, bottom sediments, clay min., 73-2335; *Schreiber*, nickeliferous smythite, 73-2891; *Seabrook Lake complex*, nepheline, pyroxene, biotite in ijolite, 73-2868; *Steep Rock Lake*, maghemite, 73-739; *Sudbury*, magnetite, ilmenite occurrence, composition, 73-4045, michenerite & froodite, 73-2899; *Sudbury, Strathcona mine*, pyrrhotite, min., thermomagnetic study, 73-2890; *Tweed*, diopside-tremolite dolomitic marble, origin, 73-3156; *Wawa*, extrusive basaltic komatiite, 73-4165

—, QUEBEC, *Bear Lake mine*, mins., 73-1094; *Charlevoix*, Palaeozoic rocks related to impact structure, 73-2795; *Forsyth*, magnetite deposit, origin, 73-282; *Gaboury Township*, nickeliferous smythite, 73-2891; *Gaspé Peninsula*, fold structures, 73-4123; *Hull-Maniwaki, Hull-Waltham*, rock, min. specimens, 73-1093; *Kipawa Lake*, eudialyte in syenitic rocks, 73-2933; *Lac Croche complex*, Rb-Sr isotopes in, 73-2675; *Lac Rowray*, deformation textures in anorthositic mass, 73-3007, tectonic evolution, 73-3008; *Manicouagan*, geol. and petrol. of resurgent caldera, 73-847; *Marbridge*, Ni-Fe sulphide deposits, min., 73-1874; *Mont St. Hilaire*, ekanite, crystal structure 73-1298, data 73-2802, elpidite, crystal structure, 73-2369, mobility of elements in soil profiles, 73-1694; *Montreal I.*, *St.-Michel*, Zr & Nb in silico-carbonatite sill, 73-507; *Mount Johnson*, zoned intrusion, igneous differentiation models, 73-4166; *New Calumet*, Hg anomalies, 73-2308; *Noranda*, geochem. processes in ore formation, 73-2561; *Horne mine No. 5 zone*, volcanic origin, 73-2508; *Oka*, carbonatite, O & C isotopes in coexisting mins., 73-1676, melilite & garnet, EM anal., 73-2820, formation of melilite in, 73-3079; *Rouyn-Noranda area*, Archaean rocks of Canadian Shield, 73-948; *Schefferville*, geol. cross-section of Labrador Trough, 73-3001; *Shefford Mt.*, iron knebelite from nordmarkite, 73-2799; *Val d'Or*, ore min. of Cu deposit, 73-2895

—, SASKATCHEWAN, north, Precambrian gneiss, structure, 73-4343; *Eldorado*, U deposits, paragenesis & isotopic composition of gangue mins., 73-2665; *Eldorado Fay mine*, multiple deformation of crystalline rocks, 73-3190, structural studies of U deposit, 73-2507; *Esterhazy*, halite bodies in sylvinite mining zone, 73-2524; *Fay mine*, age of gneiss & discordant pegmatite, 73-3294; *La Ronge-Creighton*, rock, min. specimens, 73-1093

—, YUKON, *Bennett Lake*, cauldron subsidence, evolution, 73-967; *Burwash Creek*, porphyry Cu-Mo prospect, K/Ar age, 73-2227; *Faro, Vangorda, Swim*, Pb-Zn deposits, geol., origin, 73-2482; *Gillespie Lake*, new mineral pellyite, 73-2947; *Keno Hill area*, Au in stream sediments, 73-2483; *Keno Hill-Galena Hill area*,

CANADA, YUKON, (contd.)

- Pb-Zn-Ag-Cd deposits, S isotopes, 73-1636, 1637
- Canal Flats, British Columbia v. Canada*
- Canary Is. v. Atlantic Ocean*
- Cancrinite, Egypt*, -scapolite association, petrog., chem., X-ray powder diffraction data, 73-4032; *Ontario*, new superstructure, 73-2395
- Canfieldite, Russian SFSR*, Te-bearing, 73-1942
- Cape Breton I., Nova Scotia v. Canada*
- Cape Verde Is., v. Atlantic Ocean*
- Capillitas, Catamarca v. Argentina*
- Carbon, determination, use of automatic titrator, 73-2270; gasometric determination in sediments, 73-3327; in Apollo 12 samples, 73-3907, 3910; new polymorph, 73-1529; rapid determination of total organic and inorganic in shales and carbonates, 73-62
- dioxide, determination of acid-evolved CO₂ in silicate rocks, 73-58; H₂O mixtures, non-ideality effects, 73-2545; in reaction dolomite + quartz + water = talc + calcite + carbon dioxide, 73-1521; *Bohemian massif*, flux from lithosphere, 73-3853
- isotopes, in carbonate concretions, 73-1655; induced changes in ¹³C fractionation by blue-green algae, 73-2707; in lunar samples, 73-3909, 3910, 3913; systematics in hydrothermal ore deposits, 73-3767; *Arkansas*, carbonatite, 73-1676; *Czechoslovakia*, in dolomite & calcite, 73-1691; *Germany*, in dolomite & calcite, 73-1690; *India*, in limestones, 73-528; *Kansas*, in shales, 73-542; *Quebec*, carbonatite, 73-1676; *Texas*, stable, in blue-green algal mats, 73-1686
- tetrabromide, crystal growth, 73-338
- Carbonates, aragonitic skeletal, early cementation, 73-4224; biogenic, as precursors for biomedical materials, 73-3624; C isotopes in concretions, 73-1655; compositional changes of recent mollusc shells on sea floor, 73-3755; crystallization of NaNO₃ & LiNO₃ on, 73-1575; deep sea, dissolution facies & age-depth constancy, 73-3106; determination, use of automatic titrator, 73-2270; gasometric determination in rocks, 73-1172; identification & genesis from staining, 73-2277; magnesian, distribution in geological column, 73-526; manometric determination, 73-4067; quantitative determination in greenschist facies rocks, 73-2253; rapid determination of total organic and inorganic C, 73-62; routine anal. in unconsolidated sediments, 73-2279; sedimentary mins., book, 73-3363; silica-bicarbonate balance in ocean & early diagenesis, 73-2722; *Bahamas*, min. of sediments, 73-4299; *Barbados*, diagenesis in coral cap, 73-4300, submarine cementation of sediments, 73-4301; *Belgium*, in cone-in-cone concretions, 73-2916; *Caribbean Sea*, analytical study of sediments, 73-527; *Carlsbad Caverns*, deposition, 73-4292; *Czechoslovakia* in coal seams, min., 73-1918; *New Zealand*, diagenesis of spherulitic concretions, 73-4265; *Oklahoma*, survey of deposits, 73-296; *Shetland Is.*, mineralization associated with tuffisites, 73-2965; *USA*, for control of SO₂ in flue gases, 73-3652
- rocks, determination of calcite: dolomite using air-comparison pycnometer, 73-3306; acetate peels, 73-3309; petrogenetic classification, 73-3105; sedimentary, nomenclature & classification, 73-4223;

- stained dry cellulose peels, 73-3308; *Indian Ocean*, phosphatic, diagenesis, 73-4264; *Lebanon*, & derived soils, chem., X-ray study, 73-1250; *Pacific Ocean*, from deep sea cores, 73-2991; *Poland*, min., 73-2083, *Zechstein*, heavy min. data, 73-4243; *USA*, in phosphate field, geochem., 73-2699
- sediments, deep sea, geochem. 73-1684; impure, froth flotation, 73-3305; marine, C & O isotopes, 73-3829; recent marine, min., 73-4298; primary rhombic calcite in, 73-4225; quantitative min. anal., comparison, 73-3318; U distribution in, in hypersaline pool, 73-2714; *Gulf of Aqaba*, geol., geochem., 73-3828; *Pacific Ocean*, C & O isotopes in, 73-3829
- systems, metasomatic reactions in, 73-3673
- Carbonatite, apatite-calcite equilibria, 73-2928; composition of magnetites in, 73-740; *Arkansas*, O & C isotopes in co-existing mins., 73-1676; *Australia*, only known occurrence, 73-4158, Sr isotope values, 73-3807; *Baltic Shield*, age, 73-3276; *Finland*, geol. of complex, 73-855; *India*, in nepheline syenite band, 73-891, petrog., 73-892, veins in granite, min. chem., 73-4314; *Norway*, relations with syenite, 73-2020; *Ontario*, geol. petrol. of complex, 73-1998; *Quebec*, formation of melilite in complex, 73-3079, *Quebec*, O & C isotopes in co-existing mins., 73-1676; *Russian SFSR*, banding in, 73-2972; *Uganda*, indication of concealed complex, 73-984; *USSR*, with rare metals, 73-833
- Carboxylic acids, from tasmanite, 73-3816
- Cardigan v. Wales*
- CARIBBEAN SEA, carbonate sediments, 73-527; geophysical, tectonic & petrol. studies, 73-2008, *Beata Ridge*, igneous rocks, 73-2011, *Yucatan Channel*, low-grade metamorphic rocks, age & tectonic implications, 73-3202
- Carinthia v. Austria*
- Carlin, Nevada v. USA*
- Carlingford, Lough v. Ireland*
- Carlsbad Caverns, New Mexico v. USA*
- Carminite, New Jersey*, 73-4370
- Carn Chinnneag, Ross-shire v. Scotland*
- Carnotite*, visible & near-IR spectra, 73-1066
- Carpathian Mts.*, geochem. of P in Tertiary sediments, 73-1700; also *v. Poland, Romania*
- Carrascal v. Portugal*
- Cartersville, Georgia v. USA*
- Cascade Mts., Washington v. USA*
- Cascadia Basin v. Pacific Ocean*
- Cascata Toce v. Italy*
- Caspian depression v. USSR*
- Cassiar, B.C. v. Canada*
- Cassiterite*, determination in silicate rocks with Sn & differentiation from silicate-bound Sn, 73-3337; Fe solubility in, 73-360; *Maine*, specimens, 73-4367; *Queensland*, magnetic, 73-1910; *S. Dakota*, 73-2538
- Cataclasites classification, 73-4326
- Catamarca v. Argentina*
- Catania, Sicily v. Italy*
- Catapleite, Russian SFSR*, 73-2930
- Cathlamet, Washington v. USA*
- Cation exchange capacity & metal deposition, 73-1646, 1647
- Caucasus, Russian SFSR v. USSR*
- Cauldron subsidences, *Yukon*, 73-967
- Cavan v. Ireland*
- Cavansite, Oregon*, new min. 73-4079, 4080

Cave in Rock, Illinois v. USA

- Caves, structures affecting initiation limestone, 73-1111; volcanic ash horizon in sediments, 73-3265; *Tennessee*, descriptions, 73-1113
- Ceara v. Brazil*
- Celadonite v. mica
- Celestine, synthesis & Ba, Sr sulphate solution crystals, 73-2602; *Belgium*, X-ray powder data, 73-2911; *Iran*, deposits, 73-3635; *Mexico*, quantity in fluo. deposit, 73-293; *S. Australia*, occurrence, 73-2521; *United Kingdom*, occurrence, production, 73-3626
- Celsian v. feldspar*
- Cement, hydrated, structure, 73-1517
- Centreville, Virginia v. USA*
- Cerargyrite, California*, 73-3584
- Cerium, chem. field tests for detection, 73-570; with La, in alkaline rock, isotope-excited XRF, 73-1180; *China*, deposits, 73-2537
- Cerro de Pasco v. Peru*
- Cerussite, manometric determination, 73-4067; *New Mexico*, large specimen, 73-3252; *Tasmania*, 73-1091
- České Středohoří v. Czechoslovakia*
- Cevennes v. France*
- Ceylon v. Sri-Lanka*
- Ceylonite, elasticity, 73-2157
- Chabazite, *Japan*, Sr containing, 73-729
- Chadobets uplift, Russian SFSR v. USSR*
- Chagai v. Pakistan*
- Chalcedony, *Surrey*, 73-2176
- Chalcocite, preparation of single thin crystals, 73-2589; *S. Dakota*, in mine dump, first report, 73-3649
- Chalcopyrite, colour related to quality, polished surface, 73-2898; EM study, microelements in, 73-4054; flotation with dialkylidithiocarbamates, 73-249; heated exsolution products, 73-3704; leaching, 73-1348; Mössbauer, parameters for Fe(II), 73-3483; orientation & growth of skeletal sphalerite in, 73-1880; paragenesis with sphalerite & galena, 73-4005; phase relations with stannite, 73-371; quantitative anal. using SEM with energy dispersive X-ray analyser, 73-335
- Bushveld complex*, 73-756; *Vancouver* crystal structure, 73-3486; *Yugoslavia* specimens, 73-4362
- Chalcopyrrhotine, *Bushveld complex*, possible occurrence, 73-756
- Chaleur Bay, New Brunswick v. Canada*
- Chalk, *Germany*, porosity, CaCO₃ content, flint genesis, 73-4239; *Hertfordshire*, petrog., origin of deposits in solution pipes in, 73-193
- Chalk R., Ontario v. Canada*
- Chambersite, magnified photographs of crystals, 73-1203
- Chamosite v. berthierite
- Chamundi, Mysore v. India*
- Channel Is., California v. USA*
- Channeling, application of crystallography to, 73-3452
- Charlevoix, Quebec v. Canada*
- Charnock, Job, and charnockite, bibliography, 73-1043
- Charnockite, origin, 73-2106; *India*, evolution of series in relation to granitization, 73-1055
- Charron Lake, Manitoba v. Canada*
- Chavaniac, Haute-Loire v. France*
- Cheleken, Turkmenia v. USSR*
- Chelima, Andhra Pradesh v. India*
- Chemical analysis, of minerals, review, 73-2266; of rocks, modified calculation & new graphical representation, 73-818

- chemical equilibria in the Earth, book, 73-86
 chemical erosion, *USSR*, subsurface, 73-2704
 chervonite, solid solution with xenotime, 73-4072
 chert, deep-sea cristobalitic, morphology, 73-3155; from dolomitization of illitic limestones, 73-4230; origin, 73-1853; properties & reactivity in alkali, 73-3651; *Atlantic Ocean*, nature of SiO_2 phases, 73-719; origin of deep-sea, 73-3154; *British Columbia & Washington*, petrog., chem. anal., 73-4270; *Derbyshire*, poly-phase mineralization, 73-2080; *Italy*, bedded, SEM, XRF, X-ray diffraction studies, 73-2084; *Pacific Ocean*, origin, 73-2993
 hercynite, *Gabon*, in Sorbonne collection, 73-3266
 Cheviot Hills *v. England*
 Chhindwara, *Madhya Pradesh v. India*
 Chiatara, *Georgian SSR v. USSR*
 Chibuluma *v. Zambia*
 Chikmagalur, *Mysore v. India*
 Chihuahua *v. Mexico*
 Chidoro-esophorite, *Brazil*, gem quality, 73-459
 HILE, B. mins. distrib., 73-303; Cainozoic volcanism, structural & petrol. characteristics, 73-951; Cu-bearing tourmaline breccia pipes, geol. min., fluid inclusion studies, 73-1408, 1409, origin, 73-3589; distribution of metamorphic facies, 73-852; central, chem. petrol. of volcanics, 73-922; south, chronology of crystalline rocks, 73-2221, 2222; *Aconagua*, *Montenegro*, bauxite ore, geol. min., chem., 73-1490; *Alcaparrosa*, copiapite, crystal structure, hydrogen bonding, 73-1325; *Atacama Province*, Copiapó, As-Sb alloys, 73-2902, dimorphite of supergene origin, 73-2901, *Mantó Esperanza mine*, normal Fe-bearing covellite, data, 73-763; *Chiloe I.*, geol., 73-853; *Monturaquí*, impatite, petrog. & EM study, 73-644; *Pampa Larga*, *Alacarán*, native arsenian Ag, 73-4037; *Potrerrillos*, geological occurrence of MoS_3 , 73-812; *Rancagua*, natural hexagonal Cu_{1-83}S , 73-4084; *Sierra Gorda*, *Mina Santa Ana*, santanite, new mineral, 73-2948
 hiloe I. *v. Chile*
 HINA, rare-element min. deposits, 73-2537; north, age of Precambrian metamorphics, 73-20
 HINA SEA, aeolian dust-loadings, min., 73-4263
 hina clay, *Pakistan*, chem. properties, 73-3399, phys. properties, 73-3398
 hindamora *v. Rhodesia*
 hinkuashih *v. Taiwan*
 hitose, *Sapporo v. Japan*
 hittagong *v. Bangladesh*
 hityal, *Andhra Pradesh v. India*
 hkalovite, synthetic, 73-2610
 chloride, anal. of H_2O -extractable, in rocks, 73-2308; partitioning between silicate melt & co-existing aqueous phase, 73-2547
 chloride ions, determination in aqueous soil extracts & H_2O , 73-3329
 chlorine, in intrusives, as prospecting tool, 73-1742; in partially serpentinized dunite, 73-2688; in silicate rocks, rapid determination, 73-3328; XRF determination in standard silicate rocks, 73-1177; *USA*, in biotites from intrusives, 73-3761
 lorite, coatings on quartz grains & porosity, 73-4287; composition in meta-
- morphic rocks related to its origin, 73-700; composition from X-ray spacings & intensities, 73-4019; dioctahedral one-packet, structure, 73-2381; examination by ultra-microtomy & high resolution EM, 73-3307; 14 A, identification and characterization, 73-699; oxidation in soil clays & effect on DTA curves, 73-2319; polytypism in sedimentary rocks, 73-701; X-ray & electron diffraction study, 73-3463; *Alps*, opt. chem., data, 73-1791; *Atlantic Ocean*, in aeolian dusts, 73-2088; *Belgium*, in pelitic rocks, X-ray powder data, 73-4327; *California*, from granitic rocks, occurrence, chem. comp., 73-2842, series investigation, 73-4018; *Germany*, in lamprophyres, min. data, 73-677; *Iceland*, formation in geothermal area, 73-1005; *Japan*, dioctahedral, 73-1831; *Ontario*, spots in intruded rocks, 73-3560; *Switzerland*, opt. data, 73-4365
 Chloritoid, *Austrian Alps*, genesis, paragenesis with staurolite, 73-3991; *New South Wales*, in shear zones, chem., X-ray data, opt. props., 73-1800; *Norway*, 73-2175
 —, ottrelite, *Belgium*, in pelitic rocks, X-ray powder data, 73-4327
 Chlorophaeite-palagonite minerals, *Russian SFSR*, 73-1836
 Chloropyromorphite *v. pyromorphite*
 Choctawhatchee Bay, *Florida v. USA*
 Chondrodite, *New Jersey*, 73-4370
 Chota Udaipur, *Gujarat v. India*
 Chromatography, circular thin-layer, in qualitative min. anal., 73-3341
 Chrome-spinel *v. picotite*
 Chromite, improved anal. scheme, 73-3326; quantitative anal. using SEM with energy dispersive X-ray analyser, 73-3350; zoned with titanomagnetite, 73-1901; *Egypt*, anal. of ores, 73-4042; *India*, idiomorphic & lamellar in dunite, 73-743; *New South Wales*, podiform, variation in chem. & phys. properties, 73-1900; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341, nodular, origin, 73-3538; *Spain*, composition in Cr-Ni ores, 73-4038
 Chromitites, *India*, bedded, min. chem., composition, 73-3605, primary structures in, 73-3604; *Montana*, zone in complex, immiscible sulphide liquids in, 73-1652
 Chromium, in lunar fines & crystalline rocks, 73-3923; non-destructive NAA, 73-73; ores & materials, chem. anal., 73-2269; *Yugoslavia*, in sedimentary Fe ore, 73-258
 — minerals & compounds, Cr_2O_3 , epitaxial growth on rutile, 73-1543; Cr^{2+} -containing orthosilicates, synthesis & optical absorption spectra, 73-1580; MgCr_2O_4 - MgFe_2O_4 series, equilibrium studies, 73-365; Ti & Ti-Cr oxide systems & swinging shear planes, 73-96; *Czechoslovakia*, paragenesis, 73-687
 Chrysocolla, EM & diffraction identification, 73-1823; *Arizona*, black, nature & origin, 73-2513; *New Jersey*, 73-4370
 Chrysotile, hydrochrysotile, dehydration, 73-3373
 Chvalteice, *Bohemia v. Czechoslovakia*
 Cieszyn *v. Poland*
 Cinnabar, crystal growth, 73-330, 331; growth of large single-crystals, 73-1564; precipitation in metasomatic deposits, effect of Fe on, 73-2661; *Russian SFSR*, in placers, 73-2473
 Ciply, *Hainault v. Belgium*
- Cis-Baikalia, Russian SFSR v. USSR*
Ciscaucasia, Russian SFSR v. USSR
Čistá-Jesenice massif, Bohemia v. Czechoslovakia
 Clastic formations, & orogenic cycles, 73-4098
 Clausthalite, *Poland*, in ores, 73-3535
 Clay, adsorption of H_2O , 73-1221; chlorinity indicating palaeosalinity, 73-2692; dye aggregation on surface, 73-2321; freeze-dried and thawed, 73-154; hydroxy-aluminium interlayered, swelling characteristics, 73-129; impact-compacted, microstructure and pore structure, 73-152; indurated, durability-plasticity classification, 73-1264; mechanical formation of preferred orientation, 73-2567; mechanisms controlling permeability, 73-147; micaceous, relation of K exchange & fixation to weathering & organic matter content, 73-125; oriented, directional variation of elastic wave velocities, 73-3386; preparation of pelleted samples for DTA, 73-38; recognition of interstratified, 73-103; sample changer for oriented aggregates in X-ray diffraction, 73-3317; sample disturbance in structure investigation, 73-1275; shear distortion, techniques for fabric viewing, 73-104; surface properties, cation migration into empty octahedral sites, 73-122; suspensions, particle geometry and optical density, 73-150; use of SEM, 73-101; *Belgium*, in soils from Dinantian limestones, min., 73-1238; *Central Asia*, from granites, Nb & Ta in, 73-1665; *Gruzinskaya SSR*, min., 73-2329; *Illinois*, resources, 73-3439; *India*, resources, 73-3645; *Kentucky*, anal., 1960-1970, 73-1265, partly of volcanic origin, 73-1000; *Norway*, min., geochem., 73-3427; *Oklahoma*, resources, 73-1366, 1367; *Ontario*, microstructure & engineering behaviour, 73-1267, weathered green, 73-2334; *Oregon*, of volcanic ash soils, tr. elem. concentration in, 73-176; *Pakistan*, high-Al, physico-ceramic properties, 73-3636, DTA studies, 73-3639, min., 73-3428; *West Indies*, soil-, behaviour of K in, 73-1222
 Clay minerals, acid-base properties & catalytic activity, 73-1224; adsorption of hydroxy-Al & relation of K/Ca c.e. selectivity, 73-123; biodegradability in organic-clay sorption, 73-168; classification & nomenclature, 73-2314; degradation by H_2O_2 , 73-100; detection of polygorskite in mixtures, 73-98; diagenetic alteration in shales, 73-200; formation & stability of hydroxy-Mg interlayers in phyllosilicates, 73-142; formations in basaltic soils in tropics, 73-3437; in fuller's earth, 73-3443; in min. mixtures, quantitative anal., 73-3321; interactions with organic polymers, 73-166; low T hydrothermal synthesis, 73-347; methylene blue absorption, 73-165; Mg-Fe replacement in, in anoxic marine sediments, 73-201; mounting techniques for X-ray diffraction anal., 73-3313; opt. absorption spectra, 73-3381; preparation of orientated specimens for X-ray diffraction anal., 73-1215, 2256; randomly orientated powders for quantitative X-ray determination, 73-1214; reactivity with acids and alkalis, 73-137; relationship to B-salinity in modern deltas, 73-2733; selective sorption and fixation of cations, review, 73-117; structural transformations under pressure, 73-1608; synthesis with quartz,

Clay minerals, (contd.)

- 73-1230; transformation at high T & P , 73-2616; use of SEM, 73-101; *England*, of North Sea drift, 73-3404; *Illinois*, in coals, 73-3424, in lacustrine sediments, 73-3434; *Louisiana*, selective adsorption of Na, 73-118; *New Mexico*, chem., phys. data, 73-3440, in caliche deposits, 73-1260; *New Zealand*, in glauconitic ocean sediments, 73-3418; *Oklahoma*, in Wellington formation, 73-1257; *Pacific Ocean*, in late Pleistocene & Holocene sediments, 73-1253; *Pennsylvania*, in soils, 73-207; *Poland*, in shales, 73-1248; *Puerto Rico*, in weathered products & river sediments, 73-3420; *Scotland*, formation in weathered boulder conglomerate, 73-208; *Switzerland*, molasse, 73-1240; *Taiwan*, from alteration of mafic & intermediate rocks, 73-1252; *USA*, in river sediments, 73-3429, south east, transport & deposition, 73-3425; *Virginia*, in Pleistocene alluvium, palynological correlation, 73-1255; *Washington*, formation in alpine environment, 73-206; *Wyoming*, of Green River formation, 73-1259
- organic complexes, coloured, mechanisms of formation, 73-169; seminar, 73-174
- soils, hydroreology, 73-3397; *South Vietnam*, nature, 73-209
- Clausthal v. Germany*
- Clear Creek County, Colorado v. USA*
- Cleavelandite v. feldspar*
- Cleveland mine, Tasmania v. Australia*
- Cliffwood, New Jersey v. USA*
- Cligga Head, Cornwall v. England*
- Clinochlore, -kaolinite bodies, SEM, 73-2620
- Clinohumite, *Finland*, crystal structure, 73-2362
- Clinoptilolite, composition, opt. props., cell dimensions, thermal stability, 73-1860; polymorphism & crystal chem., 73-1859; *Alaska*, in bentonites, 73-4029; *Mexico*, first occurrence in sedimentary rocks, 73-4297
- Clinopyroxene v. pyroxenes
- Clinosafflorite, *Ontario*, anal., 73-3554
- Cloncurry, *Queensland v. Australia*
- Closure temperatures, of geological systems, 73-3268
- Coahuila v. Mexico*
- Coal, Ge content, relation to ash, 73-2702; new opinions in petrog., 73-981; tr. elem. anal., 73-2703; *Colorado*, dykes intruding lamprophyre sills, 73-1012; *Cornwall*, biaxial vitrinite, 73-2082; *Czechoslovakia*, min. admixtures in, 73-4049; *Germany*, brown, & its ash, min., 73-1518; *Hungary*, distribution of Mo, V & Cr, 73-1704; *India*, & burnt coal & para lava, petrol., 73-1011, phys. constitution, 73-2090; *New Zealand*, reflectance measurements, 73-2171; *N. America*, Pb isotopes in, 73-547; *Oklahoma*, resources, 73-1366, 1367; *USA*, determination of Hg in, 73-546
- Coalinga, California v. USA*
- Coast Mts., B.C. v. Canada*
- Coast Range, Alaska v. USA*
- Coats Land v. Antarctica*
- Cobalt, *Ontario v. Canada*
- Cobalt, non-destructive NAA, 73-73; polarographic determination in Fe meteorites, 73-81; *Zambia*, geol., palaeogeog. of deposits, 73-1423
- oxide, crystal structure, 73-2405
- Cobaltite, *Ontario*, anal., 73-3554; *Quebec*, in Cu deposit, EM anal., 73-2895;

Cobar, N.S.W. v. Australia

- Coesite, -quartz transformation at high T , 73-3748
- Coeur d'Alene, Idaho v. USA*
- Colemanite, visible & near-IR spectra, 73-1066
- Coll, Argyll v. Scotland*
- Collinsite, *S. Australia*, zincian, 73-3502
- Collophane, *Carpathian Mts.*, in Tertiary sediments, 73-1700; *Sarawak*, in cave guano, 73-800
- COLOMBIA, emerald mining history, 73-2632; fragmented Andean belt, 73-2008; *Guajira Peninsula*, detrital serpentinite, 73-2008
- Colorado v. USA*
- Colorado R. delta, California v. USA*
- Colour centres, phys. properties, as geol. thermometers, 73-3452
- Columbia R. v. USA*
- Columbite, *Ghana*, in pegmatite, 73-1816; *Maine*, specimens, 73-4367; *Norway*, Sn content, 73-3765
- Columbite-tantalite, *S. Dakota*, 73-2539
- Comores Archipelago v. Indian Ocean*
- Computer analysis, "Geolog System" for geol. data, 73-3322
- controlled flotation plants, 73-3522
- programmes, crystal structure analysis calculations, 73-1279; data reduction in NAA, 73-1184; for quantitative spectrochemical anal., 73-2293; identification of X-ray diffraction patterns of unknown substances, 73-2257; plotting EM elemental profiles, 73-1182; registration system for geological collections, 73-82; test of significance of clustering of data point in a three-variable closed array, 73-2653; to calculate integral particle size distribution, 73-3310; to store rock data, with on-line printer, 73-42
- Cone-in-cone concretions, *New York*, min., origin, 73-4276
- Cone-sheets, as a mechanism of uplift, 73-820
- Conglomerates, *India*, deformation, 73-938
- Congo v. Zaïre*
- Conjuror Bay, Great Bear Lake, N.W.T. v. Canada*
- Connecticut v. USA*
- Connemara, Galway, v. Ireland*
- Contact metamorphism, temperature field of sheet intrusions, 73-1017; *Czechoslovakia*, acid rocks at contacts of basic rocks with biotite gneisses, 73-1015; *Polish Carpathians*, around teschenite intrusions, 73-1016
- Continent formation, 73-4089
- Continental drift, & min. exploration, 73-1351, 1352; & sea floor spreading, 73-2305; *Angola*, 73-1954
- margin, *British Columbia*, tectonics, 73-3004
- plates, geochem. evolutionary trends, 73-470
- Conway, Caernarvon v. Wales*
- Cookeite, *Arkansas*, in veins in sandstone, X-ray, chem. data, 73-1835; *Pyrenees*, in hydrothermal veins in sandstone, 73-2846; *W. Australia*, unusual composition, 73-2845
- Coolac, N.S.W. v. Australia*
- Cooper, W. Australia v. Australia*
- Cooperite, *Bushveld complex*, 73-756
- Copiapite, *California*, ferrian, crystal structure, 73-3495; *Chile*, crystal structure, hydrogen bonding, 73-1325
- Copiapó, Atacama v. Chile*
- Copper, concentration control of soluble in mine tailings stream, 73-2728; determination in presence of Fe, 73-69; distribution,

- 73-560; flameless AAS & ion-sensitive electrodes in exploration, 73-2308; native magnified photographs of crystals, 73-1203; simple field & laboratory determination, 73-3330; *British Columbia*, biogeochem. prospecting, 73-563; *California*, in rock tubes, 73-4036; *Canada*, geomathematical evaluation of area, 73-284; *Chile*, in breccia pipes, geol. fluid inclusion studies, 73-1408, 1409; origin, 73-3589; *England*, supergene nat., 73-4559; *India*, native, in Deccan trap, 73-2875; *Montana*, mining, 73-1401; *New Mexico*, resources, 73-3587; *Pennsylvania*, geochem. prospecting, 73-568; *Poland*, native, in ore deposits, 73-3533; *Taiwan*, in soils in Au-Cu district, 73-1741; *USA*, mining history, 73-2458; *Vermont*, geochem. prospecting, 73-1740; *Wales*, resources, industry, 73-1371
- concentrates, dissolution, 73-2457
- deposits, porphyry, H & O isotope ratios in mins., 73-1649, importance of wall rock in mineralization, 73-2456; plate tectonic model for origin, 73-2456; with Mo, geol. & characteristics, statistical study, 73-3512; Precambrian conglomerate sulphide ore, 73-1431; stratified classification & distribution, 73-2295
- Alaska*, geol., 73-1382, min., S isotopes, 73-1452; *Appalachians*, distribution, 73-1394; *Arizona*, Holocene, 73-1463; *Brazil*, metamorphosed Precambrian, 73-1469; *British Columbia*, age, 73-287; source, age, 73-1650, 1651; *Egypt*, geol., 73-3596, 3597; *India*, min., 73-2502, isotopes in, 73-3770, tr. elem. geochem. genesis, 73-3543, with zone of Pb & barite mineralization, 73-273; *Michigan*, mineralization discussions, 73-1455 to 1459; mining extensions, geol., 73-3618, rock above & below ore zone, petrochem., 73-1648, S isotope study, 73-3769; *Nevada*, porphyry, ore fluids in, 73-1464; *New Brunswick*, 73-3567; *New South Wales*, geol., 73-3611; *Newfoundland*, geol., 73-3193; *Pakistan*, geol., 73-1378; *Poland*, mineralization, 73-3535; *Puerto Rico*, Au as guide to porphyry, 73-2308; *Quebec*, ore min., 73-2895; *Russia*, SFSR, zoning, 73-268; *S. Australia*, isotopes in, 73-3771; *Tasmania*, oxidation, 73-3613; *Turkey*, geol., 73-3594; *Ukraine*, petrol., 73-2498; *Urals*, related to gabbro-diorite intrusions, 73-1425; *Utah*, 73-2511; *Zambia*, geol., palaeogeog., 73-1423
- mineralization, porphyry-type, micro biological leaching, 73-3683; *Arizona*, porphyry, relation to regional fracturing, 73-2487; *New South Wales*, geol., 73-3544; *Portugal*, possible 73-2468; *Russian SFSR*, 73-2474; *Utah*, age, 73-287
- minerals & compounds, CuPS₄, CuPS₂, crystal structure, 73-3490; disulphide stability, phase equilibria, 73-2590; leaching of sulphides, 73-1348; new Cu-Sn alloy (η' -Cu₃Sn₂), 73-811; new synthetic sulphosalt, Cu₂SbS₃, 73-1563; phase changes in Cu₂S as function of T , 73-96; preparation & properties of CuFeS_{2-x} & Cu_{1-x}Fe_{1-x}S_{2-y}, 73-96; sulphosalts, in system Cu-As-S, 73-1569; phase relations in system Cu-Sb-S, 73-3705; *Kazakhstan* & *Russian SFSR*, new Bi-sulphides of Ag, Cu, Pb, 73-1945
- ores, *Bulgaria*, flotation, 73-3595
- Copper-molybdenum deposits, porphyry type, intermineral intrusions & bearing on origin of, 73-2455; *Armenia*, geochem. of Pt group elems., 73-3783

Copper Canyon, Nevada v. USA
 Copper King mine, Boulder County, Colorado v. USA
 Coppermine I. v. New Zealand
 Coppermine R., N.W.T. v. Canada
 Cordes, Arizona v. USA
 Cordierite, compatibility with cummingtonite & gedrite, 73-3736; devitrification behaviour, 73-1511; experimental high *P* hydration, 73-3732; Fe^{2+} & Mg partitioning with garnet, 73-3731; H_2O , CO_2 content as guide to petrogenesis, 73-1806; irrational composition planes in sector trillings, 73-2821; oxidation with almandine, 73-2608; stability in pelitic compositions at high *P* & *T*, 73-402; stability with garnet at high *P* & *T*, 73-2575; transformation trilling, 73-1805; *Czechoslovakia*, in gneisses, chem. anal., 73-1807; *France*, alteration in granite, derived soil & sand, 73-664; *Switzerland*, triplet at granite contact, 73-4360; *W. Australia*, low-Fe, in phlogopite schist, 73-3995
 Cordierite-gedrite rocks, *Ontario*, petrog., min., 73-4305
 Cordierite-sillimanite rocks, *Labrador*, min., textures, 73-1009
 Cornetite, magnified photographs of crystals, 73-1203
 Cornwall v. England
 Coromandel County v. New Zealand
 Coronadite-hollandite, *Wyoming*, in fossil bone, 73-1913
 Coronation, N.W.T. v. Canada
 Coronas, in metagabbros, 73-3196
 Corsica v. France
 Corundum, equilibrium with diaspore, 73-1547; free energy of formation & aqueous solubility, 73-1548; needles in, 73-452; synthetic, as X-ray monochromator, 73-2295; Ti^{3+} ion in, 73-2402; -type structures, crystal chemistry, 73-1319; *Australia*, assoc. with ilmenite & spinel in granulite facies rocks, 73-2876
 Cosmochlore, synthesis, 73-413
 Cosmo Hot Spring, Inyo County, *California* v. USA
 COSTA RICA, tectomagmatic & metallogenic relationships, 73-1405
 Côtes-du-Nord v. France
 Cottian Alps v. Italy
 Cottonwood, Utah v. USA
 Covellite, blue remaining, phase relations in Cu-S system, 73-1562; colour related to quality of polished surface, 73-2898; formation in low-*T* aqueous solutions, 73-381; *Bushveld complex*, 73-756; *Chile*, Fe-bearing normal, data, 73-763
 Cowee Valley, Macon County, *N. Carolina* v. USA
 Craftsburg, Vermont v. USA
 Craigmont, B.C. v. Canada
 Crandallite, Utah, thermal anal., 73-1928
 Craters, circularity of Martian, 73-2186; *Labrador*, geol., 73-848
 Creede, Colorado v. USA
 Creighton, Saskatchewan v. Canada
 Crestmore, California v. USA
 Crimean Mts. Ukrainian SSR v. USSR
 Cristobalite, α -, assoc. with smectite, 73-186; chem. precipitated sedimentary, 73-1853; crystal growth at high *P*, 73-1619; formation in porcelain, 73-437; lunar, EM anal., 73-1744; origin in bentonite in relation to montmorillonite & quartz, 73-185; X-ray quantitative determination in silica refractories, 73-1155; *Alaska*, in bentonites, 73-4029; *Colorado*, known as Dotsero diamond, 73-1097

Crocidolite v. amphibole
 Crocoite, magnified photographs of crystals, 73-1203; *Tasmania*, finest specimens, 73-1091
 Cromer, Norfolk v. England
 Crossite v. amphibole
 Crust of the Earth v. Earth's crust
 Cryolite, orbital ionization energies for Al, 73-1280; visible & near-IR spectra, 73-1066
 Cryptomelane, *France*, identification in karst deposits, 73-2885; *Mexico*, 73-2184
 Crystal chemistry, complex sulphides of As, Sb, Bi, 73-1333; corundum type structures, 73-1319; of AB_2X_4 ($\text{X} = \text{S}, \text{Se}, \text{Te}$) compounds, 73-2423; phosphorite, 73-1699
 — defects, IR studies, book, 73-2310
 — geometry, introduction, book, 73-87
 — growth, anal. of combined surface & volume diffusion processes, 73-320; & epitaxy from the vapour phase, 73-1499; electrical structure of the surface of real crystal substrates, 73-1504; grain boundary migration, measurement, 73-319; hydrothermal method, 73-2546; influence of *T* grading on crystal faceting, 73-317; interaction of particles with a solidifying front, 73-1502; role of transient nucleation in 73-316; state of the art, 73-314; steady state rejection of insoluble particles by salol, 73-1503; Ag_3AsS_6 inclusions in proustite crystals, 73-1566; AgI, 73-334, 337; CB_4 , 73-338; cadmium iodide, 73-1577; CdS, 73-327; CdS, PbS, SnS_2 , monoclinic Ag_2S , 73-335; calcite, in gels, 73-1573; cinnabar, 73-330, 331, large crystals, 73-1564; forsterite, 73-1579; gibbsite, 73-1552; greigite, 73-1557; gypsum, in gels, 73-1573; in Hg-Te system, 73-1532; KBr twinning, 73-1509; KCl, 73-1507; magnesite, 73-3717; MgAl_2O_4 , 73-1535; NH_4Cl , 73-336; $\text{NH}_4\text{H}_2\text{PO}_4$, 73-1508; of Si & Ge in metal films, 73-3660; PbGeO_3 , 73-1544; PbS, dislocation distributions in, 73-1565; lamellar dendritic growth, 73-325; proustite, 73-1566, 1567; pyrrargyrite, 73-1567; pyrite solid solutions, 73-1559; pyrrhotite, 73-1557; quartz, hydrothermal growth, 73-323; silicate mins. at high *P*, 73-1619; SrSO_4 , 73-333; ZnO, 73-322; formation of dislocations in, 73-321; ZnS, epitaxial growth on sapphire, 73-329, hollow single-crystals, 73-328
 — imperfections, EM & X-ray topography studies, 73-3452
 — morphology, use of deep-field microscopy in, 73-1153
 — structure, bond length variation in TO_2 tetrahedral oxyanions of 3rd row elems., 73-2354; continuous topological variation of coordination in crystals, 73-215; geometry & environment of H_2O molecules in crystalline hydrates, 73-2356; image of S atom, 73-2357; isomorphism, 73-2350; nonideal axial ratios in metals with hcp structures, 73-1272; nonorthodox structures, 73-2425; octahedra, in 73-3445; relationships in compounds with $R_3\text{C}$ symmetry, 73-2358; silicate chains, 73-224; Strukturbericht, errata in, 73-210 transformation of trioctahedral sheet silicates, 73-1303; of minerals & compounds, aikinite, 73-1332; alkaline earth aluminates & their hydrates, 73-1318; ammonioborite, 73-238; analcite, 73-1313; anatase, 73-3476; arcanite, 73-2420; arsenstruvite, 73-3505; boléite, 73-2449; beidellite, 73-3452;

bournonite, 73-1332; calcium orthosilicate & alkali sulphates, 73-2363; cancrinite, 73-2395; cavanisite, 73-4080; chalcopyrite, 73-3486; clinomphiboles, 73-1302; chlorite, 73-2381; clinohumite, 73-2362; cobalt oxide, 73-2405; copiapite, 73-1325; cummingtonite, high, 73-1301; dumortierite, 73-1297; eitelite, 73-3500; ekanite, 73-1298; epidote, 73-2369; emmonsite, 73-3480; epidote, 73-3455; eucryptite, β -, 73-1311; eudidymite, 73-1293; ezcurrite, 73-2415; famatinite, 73-3490; fassaite, 73-3460; fawcites, 73-2396; feldspars, monoclinic K-rich, 73-3471; feldspar, RbFe, 73-2387; ferrian copiapite, 73-3495; ferrite, 73-2406; ferrotschermakite, 73-2372; fluorides, LaF_3 , CeF_3 , PrF_3 , NdF_3 , 73-2443; fluorophlogopite, 73-3462; freibergite, 73-1334; frolovite, 73-237; gonardite, 73-1314; götzenite, 73-1296; graphite, 73-2401; hanksite, 73-2419; hematophanite, 73-2450; heulandite, 73-1315; hureaulite, 73-3501; illite-montmorillonite, 73-1306; ilvaite, 73-3456; joaquinite, 73-1291; kaersutite, 73-225; kainite, 73-1327; kernite, 73-2416; landauite, 73-1320, 1321; latiumite, 73-3466; legrandite, 73-2437; 2M_2 lepidolite, 73-3465; liveingite, 73-1332; luzonite, 73-3487; manganese chlorophosphate, 73-2430, 2433; manganese fluorophosphate, 73-2430; maucherite, 73-3488; mellite, 73-2422; mendozite, 73-1328; merwinite, 73-1292; molybdomenite, 73-239; munitite, 73-222; muscovite, 73-3452; nacrite, 73-2383; natrophylite, 73-1340; nephe-line, 73-230, 1312, 2392, 2393; parkerite, 73-3484; pentagonite, 73-4080; phenakite, 73-1290; pigeonite, high & low, 73-1300; prosopite, 73-3482; pyroxene, 73-1299; pyrrhotites, 73-1329, monoclinic, 73-1330; quenselite, 73-233; reyerite, 73-3469; roesslerite, 73-2439; sandine, 73-3470; Nevada twin, 73-2385; sborgite, 73-2414; scawtite, 73-2365; scholzie, 73-3502; seligmannite, 73-1332; slavikite, 73-3497; sodium nitrate, 73-2413; stephanite, 73-1332; stibnite, 73-1335; struvite, 73-2434; talc, 73-3467; talnakhite, 73-3485; tarapacaita, 73-2420; talenite, 73-1295; thorveitite, 73-2367; tilasite, 73-2438; tin(II) iodide, 73-3491; titan-clinohumite, 73-2362; vermiculite, 73-3452; volborthite 73-1323; voltaite, 73-3496; vrbaite, 73-233, 1332; wightmanite, 73-3492; wulfenite, 73-1324; yavapaiite, 73-1326; zeolites, 73-1316, 1317; zeolite, type X, 73-2397; zeophyllite, 73-2384; zunyite, 73-231; $\text{Ba}_3\text{Si}_4\text{Nb}_6\text{O}_{26}$, 73-2370; $\text{Ca}_2\text{Fe}_{1.45}\text{Al}_{0.57}\text{O}_5\text{Ca}_2\text{Fe}_{1.28}\text{Al}_{0.72}\text{O}_5$, 73-2407; $\text{Ca}(\text{H}_2\text{AsO}_4)_2$, 73-2441; $\text{CaHAsO}_4 \cdot 3\text{H}_2\text{O}$, 73-2442; $\text{CaKAsO}_4 \cdot 8\text{H}_2\text{O}$, 73-2440; $\text{Cd}_5(\text{PO}_4)_3\text{Cl}$, twinned, 73-3503, 3504; Cu_3PSe_4 , 73-3490; $\text{Dy}_{4.67}(\text{GeO}_4)_3\text{O}$ & $\text{Ce}_{4.67}(\text{SiO}_4)_3\text{O}$, 73-2428; $\text{Fe}_2\text{O}_3 \cdot 2\text{CoO}$, B_2O_3 , 73-2417; $\text{Fe}_2\text{TeO}_{11}$, 73-1336; Li_3VO_4 , low *T*, 73-3481; $\beta\text{-Mg}_2\text{SiO}_4$, 73-216; $\text{MoO}_3 \cdot 2\text{H}_2\text{O}$, 73-1322; $\text{NaBa}_3(\text{Si}_2\text{O}_7)_2\text{OH}$, 73-1294; $\text{Na}_2\text{Mg}_2\text{Si}_6\text{O}_{15}$, 73-229, 2375; $(\text{NH}_4)_2\text{HPO}_4$, 73-1338; $\text{Na}_2\text{O} \cdot \text{SiO}_2 \cdot 6\text{H}_2\text{O}$ 73-2399; $\text{Sr}_3(\text{PO}_4)_3\text{OH}$, 73-2429; $\text{UO}_2(\text{OH})_2$, 73-2411; $\alpha\text{-UO}_3$, 73-2412; ZnO, 73-3701; compounds ABX_3 & A_2BX_6 , 73-3448

— analysis, calculation of crystal field splittings in distorted coordination polyhedra, 73-211; computer programme calculations, 73-1278; criteria for H bonding, 73-2355; direct method for determination of polytype structures,

Crystal Chemistry, analysis, (contd.)

73-1282, 1285; direct method for structures with stacking faults, 73-3450, 3451; generation & coding of layered, tetrahedrally close-packed structures of intermetallic compounds, 73-2353; identification of high order polytypes, 73-1284; interpretation of absorption spectra of Fe^{2+} -bearing materials, 73-2348; least-squares refinement & weighted difference synthesis, 73-3449; morphological distribution curves for isostructural series, 73-1274; reconsideration of Fourier methods, 73-2349

— symmetry, book, 73-89

Crystallization, metastable, mechanism, 73-2554

Crystallization temperatures, of mins. & rocks, 73-344

Crystallochemical analysis, Fedorov's, modern use, 73-3301

Crystallography, application to channeling, 73-3452; contemporary, book, 73-88; technical dictionary, 73-85

Crystallographic events, direct viewing & brief time recording of, 73-2258

Crystals, demonstration of chem. anisotropy, 73-63; epitaxy data, book, 73-91; phys. properties, tensors & group theory for, 73-3370; potential energy calculations, 73-2352; rotation faults in, 73-3447; stereographic projection, book, 73-3362; under the microscope, photographs, book, 73-1203

Cuanza Sul v. Angola

Cubanite, Mössbauer parameters for Fe(II)-Fe(III) , 73-3483; *Bushveld Igneous complex*, 73-756

Cuddapah, Andhra Pradesh v. India

Cudden Point, Cornwall, v. England

Cumberland v. England

Cumengite, Mexico, in Sorbonne collection, 73-3266

Cummingtonite v. amphibole

Cupaello, Rieti v. Italy

Cuprite, New Jersey, 73-4370; Pakistan, circular thin-layer chromatography in qualitative anal., 73-3341

Cuprobismutite, Utah, new data, 73-1887; Virginia, 73-1095

Cupropinel, Newfoundland, new mineral, 73-2941

Custer, S. Dakota v. USA

Cuttack, Orissa v. India

Cuyuni R. v. Guyana

CYPRUS, cupriferous pyrite deposits, 73-1372; two fibrous Fe sulphides & vallerite, 73-759; Troodos Massif, magmatic processes, 73-3064, reversed seismic refraction line, 73-3065

CZECHOSLOVAKIA, c.e.c. of Upper Cretaceous glauconites, 73-1223; jadeite Neolithic axes, origin of material, 73-674; travertine geochem., 73-1692; Banská Hodruša, hodrushite, EM anal., 73-2914; Banská Štiavnica, contact metamorphism, min., 73-4311; Bohemia, chem. composition of Cambrian sandstones, 73-474, double moldavites, 73-642; glauconites, type & extent of interlayering, 73-111, Lower Permian rocks, 73-978, Barrandian area, Cambrian volcanics petrochem., 73-1980, Barrandian area & Železné hory Mts., geosynclinal volcanism, 73-1981, Blanský les, multiphase deformation in granulite massif, 73-927, Chvalce, dravite asbestos, chem., min., 73-666, manganese-pyrite deposit, genesis, 73-1418, Čistá Jesenice massif, magnetite content & fabric in fenitization, 73-2028, Habry,

FeO , MgO , MnO in mins. of Moldanubian metamorphics, 73-1792, Kovářská, psilomelane in baryte vein, 73-1086, Nalžovské Hory Ag-Pb-Zn deposit, petrol. 73-257; Pecerady, ocellar texture of gabbro, 73-868, Pacov, spheroidal micro-particles from recent alluvium, 73-1777, Písek, basic inclusions in Červená granodiorite, 73-928, Písek-Týn area, Moldanubian granulites, petrol., 73-1049, Staré Ransko, edingtonite, new data, 73-730, picotite in streams, 73-1897, Železné hory Mts., acid volcanics of Vitanov Group, 63-869, Mn-pyrite horizon, metamorphic paragenesis, 73-2493; Bohemian Massif, deep fault tectonics & mineralization, 73-4105, flux of CO_2 from lithosphere, 73-3853, granitic bodies, flow & fracture fabrics, 73-2029; material import during metamorphism of pelitic schists, 73-2130, metabasite belt, regionally metamorphosed volcanic rocks, 73-1029, micas of lamprophyres, 73-2839, Precambrian metamorphic facies series, 73-1050, Re & Se content of molybdenites, 73-762; Bohemian pluton, hornblende, opt., chem. characteristics, 73-1818, trioctahedral micas & petrogenetic significance, 73-690; České Středohoří, linkage of Zr in phonolites, 73-1788; Handlová-Nováky area, min. admixtures in coal, 73-4249; Hodruša, granodiorite, Th, U & K distributions, 73-2679; Hranice, gahnite in magnetite deposit, 73-2880; Jáchymov Potůčky, gersdorffite with high lattice constant, 73-769; Karlovy Vary granite massif, geochem. of gas inclusions in rocks, 73-474; Kosice, quantitative anal. of magnesite & dolomite by IR spectrophotometry, 73-1189; Křemnice Mts., Th, U & K in neovolcanites, 73-2679; Krušné hory, intraminalization granitic dykes, 73-1417, Sn-bearing granites, petrochem., 73-1982; Low Tatras Mts., granite transformation at quartzite contact, 73-929; Lučenec, Poltár, new kaolin, 73-182; Lukovská Hora, zinc spinel, data, 73-1902; Malé Karpaty Mts., contact calcisilicate hornfelses, 73-4312, granitoid rocks accessory mins., 73-4185, size of pleochroic haloes in zircons in granitoid rocks, 73-3982; Mohelno, contact of granulites with serpentinite, quartz fabric, 73-2128; Moldanubicum, cordierite in gneisses, chem. anal., 73-1807, eclogites & garnets, chem., 73-2129, petrochem. of amphibolites, 73-474, volcanogenous origin of leptynites, 73-2131; Moravia, genesis of grossular-almandine & grunerite-cummingtonite in skarns, 73-1793, Domanín, Al, F-rich metamict titanite, 73-2803, Hermanov, phlogopite & alteration products, 73-693, Nihov, eclogite with orthorhombic pyroxene, 73-826, Petrov, paragenesis of Cr-bearing mins., 73-687; Ostrava-Karviná district, carbonates from coal seams, min., 73-1918; Petrovice, new min. krutaite, in Se mineralization, 73-2945; Podmokly, gahnite, monazite in stream deposits, 73-1903; Slovákia, almandine garnets from andesites & rhyolites, origin, 73-654; Dobšín, gersdorffite, reflectivity, 73-4056, skutterudite, 73-771; Staré Sedlo, pharmacosiderate & scorodite in conglomerates, 73-1930; Tisovec, anisotropic garnets, 73-3985; Třebíč, maghemite in ferrolites, 73-1904; Vysoký Jeseník Mts., acid contact rocks in biotite gneisses intruded by basic rocks, 73-1015

Czestochowa v. Poland

Dacca v. Bangladesh

Dacites, Lake District, almandine-pyroxene phenocrysts in, genetic significance, 73-860

Dadin Kawa v. Nigeria

Dahlite, Oklahoma, 73-2183

Dalgaranga, Yilgarn Block, W. Australia v. Australia

Daloa v. Ivory Coast

Dalwhinnie, Inverness-shire v. Scotland

Damara v. S.W. Africa

Damkjærne, Norway, with lherzolite nodules, 73-3062

Danakil v. Ethiopia

Dangoli, Uttar Pradesh v. India

Darasun, Transbaikial, Russian SFSR v. USSR

Darfur Province v. Sudan Republic

Dariba, Alwar, Rajasthan v. India

Darley Bay, N.W.T. v. Canada

Darwin mine, California v. USA

Darwin Mts. v. Antarctica

Dasht-e Kavir v. Iran

Data storage, Fortran IV plotting programme using on-line printer, 73-42; in geological mapping, 73-2260; of mass spectra, 73-2261; source of geol. specimens from coordinates, 73-43

Datolite, thermal transformation to boron melilite, 73-3730

Daubréelite, Mössbauer parameters for Fe(II) , 73-3483

Dawros, Connemara, Galway v. Ireland

Dawsonite, -analcite association, 73-2622; synthesis, properties, & K equivalent, 73-2599; New South Wales, in contact measures, origin, 73-1920

Dead Sea, organic geochem. of sediments, 73-533

Death Valley, California v. USA

Debouille, Maine v. USA

Decaturville, Missouri v. USA

Deception Island v. Antarctica

Dedan, Gujarat v. India

Dedolomitization, & rhombohedral pores in limestones, 73-4226; experimental, 73-3689; Israel, 73-4255

Deep Creek Mts., Utah v. USA

Deep R., N. Carolina v. USA

Deep Sea Drilling Project, initial reports, 73-2983 to 2995

Deerite, California, 73-4373

Dehydration equilibria, thermodynamics of, 73-2551

Delegate, N.S.W. v. Australia

Deloro, Ontario v. Canada

Demarara v. Guyana

Dendrites, Bavaria, on lithographic limestone, 73-3264

Denée, Namur v. Belgium

DENMARK, Jutland, seismic measurements, 73-3233; Paarup salt dome, geophysical studies, 73-4350

Density of rocks, *in situ* measurements, 73-4348

Density measurements, 73-3300

Derbyshire v. England

Devada, Andhra Pradesh v. India

Develline, New Jersey, 73-4370

Devon v. England

Deweyite, Japan, min. studies, 73-697

Dharmasala, Punjab v. India

Dhauladhar Range, Punjab v. India

Diamond, black material in internal fracture planes & inclusions, 73-448; brilliant cut girdle of, 73-2626; comparison of Ukrainian cubic grains and meteoritic, 73-734

- diamond, (*contd.*)
composition & origin of crystalline inclusions in, 73-1862; differences in from different sources, 73-2624; distinction from simulants, 73-2629; estimation of grade of deposits, 73-2529; etymology, 73-449; graphitization at low and high *P* 73-356, 1530; induced graphitization around crystalline inclusions, 73-357; N₂, H₂O, CO₂, CH₄, Ar, as impurities, 73-1864; optimal angles for brilliant cut, 73-450; Roman imitation, 73-2628; synthetic, internal structure, 73-2555; *Brazil*, ballas crystallites, micro-structure, 73-2627; *Guyana*, in placers, 73-754; *Ivory Coast*, repeated twin, 73-2874; *Lesotho*, 601-25 carat, history, 73-2625; *Russian SFSR*, distribution of spinel-type twins, 73-735, in sediments, 73-887, on eclogite cobble, origin, 73-3067, with olivine-garnet-chrome diopside inclusions, 73-3068; *South Africa*, growth condition, 73-1863, review of *Kimberley* district, 73-1087; diamond-structure crystals, atomistic study of cracks, 73-232
diaspore, equilibrium with corundum, 73-1547; ferriiferous, structure problems, 73-4048; free energy of formation & aqueous solubility, 73-1548; preparation of ferriiferous, 73-1549
diatomite, *California coast*, with associated sepiolite, 73-704
differential thermal analysis, applications, book, 73-1205; preparation of pelleted clay samples, 73-38; simultaneous with X-ray diffraction, 73-37; temperature standards, 73-3311
igneite-borne minerals, *Quebec*, in Cu deposit, EM anal., 73-2895
Illion, Montana v. USA
imorphite, *Chile*, of supergene origin, opt., EM anal., X-ray powder data, 73-2901
iopside v. pyroxenes
iorite, high-K, in calc-alkaline assoc., & relation to andesites, 73-1994; weathering in humid temperate climate, 73-2706; *France*, age, 73-1119; *New South Wales*, petrog. of complex, 73-908, time differences between complex & surrounding granite, 73-909; *Russian SFSR*, association with gabbro & dolerite, 73-3028
ir v. Pakistan
iraseer, N.S.W. v. Australia
istrict of MacKenzie, N.W.T. v. Canada
jebel el Kohol v. Tunisia
jebel Hallouf v. Tunisia
jurleite, New Jersey, 73-4370; *Sardinia*, EM, X-ray, DTA data, 73-2905
neiper, Ukraine v. USSR
obšidna v. Czechoslovakia
olerite, SEM study of cracks & pores, 73-2170; *England*, age of intrusions, 73-1117; *Iceland*, Tertiary with anorthosite inclusions, 73-4180; *India*, hypersthene-olivine, differentiated dyke, 73-3041, pegmatic segregation of dyke with high calcic pigeonite, 73-670; *Japan*, age, 73-21; *Newfoundland*, dykes, 73-1999; *Norway*, geochem. & metamorphism of dykes, 73-3844; *Ontario*, differentiation, 73-3550, minor elem. distribution, 73-3561; *Pakistan*, petrol., 73-4150; *Russian SFSR*, association with gabbro & diorite, 73-3028; *Devonian*, geol., age, 73-887; *Sweden*, relation of dykes to rhomb porphyry dykes, 73-3018; *Virginia*, dyke, petrog., magnetic study, 73-2002
olgarrog, Caernarvon v. Wales
olliver State Park, Iowa v. USA
Dolomite, -calcite-apatite mixtures, quantitative determination by X-ray diffraction, 73-2254; determination in carbonate sample using air-comparison pycnometer, 73-3306; experimental recrystallization, preferred orientation in deformed rocks, 73-1520; formation by ground water, 73-1723; in reaction, dolomite + quartz + water = talc + calcite + carbon dioxide, 73-1521; in spellothems, biochemical genesis, 73-478; manometric determination, 73-4067; quantitative gasometric determination in rocks, 73-1172; synthetic, porosity, 73-3691; *Belgium*, cone-in-cone concretions, 73-2916; *California*, boulder from continental shelf, 73-4288; *Carlsbad Caverns*, deposits, min., 73-4293; *Czechoslovakia*, quantitative anal. by IR spectrophotometry, 73-1189; *Florida*, distribution in tidal flat environment, 73-2099; *Germany*, in lamprophyres, 73-678; *Germany*, O & C isotopes in 73-1690; *Iowa*, behaviour in limestone weathering, 73-1693; *Israel*, zoned crystals, 73-1917; *Italy*, specimens, 73-3240; *Ohio*, gypsum crystal moulds in, 73-3140; *Oklahoma*, resources, 73-1366, 1367, 1489; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341, DTA studies, 73-3639, chem., 73-3644; *Texas*, Quaternary, origin, 73-3143; *Wales*, resources, industry, 73-1371; *Yugoslavia*, specimens, 73-4362; *Zaire*, fluid inclusions in, 73-4094
Dolomites v. Italy
Dolomitization, of illitic limestones, 73-4230; reefs & stratified mineralization, 73-251; selective, of recent sedimentary structures, 73-4295; SEM study, 73-2070; syngenetic, & sulphide mineralization, 73-2299; *Israel*, supratidal, 73-4255; *USA*, model for Cambrian-Ordovician carbonate rocks, 73-2093
Domadalshraun v. Iceland
Domaninec, Moravia v. Czechoslovakia
Donbas, Ukrainian SSR v. USSR
Donegal v. Ireland
Dorowa-Babuje v. Nigeria
Dotsero diamond, name for cristobalite, 73-1097
Dotsero, Colorado v. USA
Douglas Lake, Oregon v. USA
Dover, New Jersey v. USA
Dravite v. tourmaline
Driekop, Transvaal v. S. Africa
Dublin v. Ireland
Ducktown, Tennessee v. USA
Dufrénoysite, Peru, in solid gel, 73-2906
Duluth, Minnesota v. USA
Dumortierite, India, crystal structure, 73-1297, in quartzites, opt., chem., X-ray powder data, 73-3993; *New Zealand*, first record, 73-3992
Dundas, Tasmania v. Australia
Dundasite, Tasmania, 73-1091
Dunedin v. New Zealand
Dunganon, Ontario v. Canada
Dunite, & hydration of forsterite, 73-1522; Cl in partially serpentinized, 73-2688; elasticity, anisotropy, 73-3218; *India*, idiomorphic & lamellar chromite in, 73-743; *W. Australia*, Ni-Sulphide bearing emplacement, 73-903
Dunsmuir, California v. USA
Durham v. England
Duricrust, in tropical & subtropical landscapes, 73-2703
Duschene County, Utah v. USA
Dusts, aeolian, from lower maritime atmosphere, loading, min., 73-4263
Dwygyfylchi, Caernarvon v. Wales
Dykes, Alaska, Tertiary lamprophyre province, 73-3050; Arkansas, clastic, 73-1001; Cornwall, spilitic, chem. anal., 73-4140; France, of Armorican massif, age, 73-1118; India, differentiated hypersthene-olivine dolerite, 73-3041, kimberlitic, min., 73-895, picritic, petrol., 73-3070; Newfoundland, sheeted & brecciated, 73-3003; Sweden, relation between dolerite & rhomb porphyry, 73-3018
Dyscrasite, formation during pyrrargyrite growth, 73-1567; France, in Pb-Zn ores, 73-1891; Ontario, 73-3555
Dzhez-Kazgan, Kazakhstan v. USSR
Dzhezkazganite, Kazakhstan, 73-1630
Eagle granodiorite, B.C. v. Canada
Earlesite, California, 73-4376
EARTH, chemical equilibria in, book, 73-86; dynamic props., internal structures, 73-1071; evolution of atmosphere, 73-475, model, 73-3790; Larousse Encyclopaedia of the Earth, 73-1196; measurement & interpretation of changes of strain in, book, 73-3357; simple model, 73-2163; the dynamic, book, 73-97; Xe record of extinct radioactivities, 73-472
Earth's core, dynamics of liquid, 73-2162; electrical resistivity of liquid iron, 73-1070; formation, 73-2649; liquid outer, nature, 73-4352; phys. properties, 73-1623; solidity of inner, 73-1072; shear velocity, 73-2164; time of formation, 73-471
Earth's crust, anomalous velocity layers, 73-3232; development of early continental, 73-2648; evolution of Precambrian, 73-3157; origin of ore deposits, 73-1341; Pb & Sr isotope evolution computer simulation, 73-2650; Australia, composition & evolution of deep continental, 73-535; Canada, structure, composition, 73-846; Fennoscandia, geophysics, 73-3219; Newfoundland, Appalachian oceanic 73-1947
Easdale, Argyll v. Scotland
East Monkton, Vermont v. USA
East Pakistan v. Bangladesh
Eastern Desert v. Egypt
Eastern Ghats, Andhra Pradesh v. India
Eastern Goldfields, W. Australia v. Australia
Ebnath, Bavaria v. Germany
Echo Bay, N.W.T. v. Canada
Eclogites, classification, 73-1036; from kimberlites, O isotope ratios, 73-519; inclusions, geochem., petrogenesis, 73-1671; Arizona & Utah, xenoliths in kimberlite-bearing breccia pipes, 73-2045; Bavaria, zoisite, amphibole & white mica in, 73-2818; Caucasus, min., 73-3183; Czechoslovakia, & their garnets, 73-2129, with orthorhombic pyroxene, 73-826; Norway, five clinopyroxene phases in, 73-669, petrogenesis in high-grade metamorphic gneisses, 73-1037; Russian SFSR altered, chem. anal., 73-1038, diamond-bearing, origin, 73-3067, spessartine, min., 73-3182; S. Africa, petrol., chem., 73-2031
ECUADOR, Andes, metallogeny, 73-3588; Azuay province, San Fernando, volcanic Fe sulphide strata deposit, 73-3623
Eden, New South Wales v. Australia
Edingtonite, Czechoslovakia, new data, 73-730
EGYPT, biaxial calcite, 73-2915; gypsum & alabaster, min., chem., 73-3634; talcs., min. and ceramic props., 73-703; Abu Swayel area, Cu-Ni deposit, 73-3596;

EGYPT, (contd.)

- Eastern Desert*, refractory raw materials, chem., 73-1476; *Baramia*, chromite ores, anal., 73-4042; *Wadi El Miyah*, ilmenite occurrence, min., 73-4046; *El-Gidida*, Fe ores, geol., petrog., geochem., min., 73-261; *Esh El Mellaha*, granitic rocks, chem. anal., 73-3797; *Faiyum*, bentonitic clays, min., 73-192; *Gebel Atud*, Au-bearing quartz-wolframite vein, 73-3599; *Gebel Derhib*, Zn-Cu mineralization in talc mine, 73-3597; *Gulf of Suez*, quartz sands, min., 73-4252; *Kharga Oasis*, Beris, Nubia sandstone, porosity, permeability, mechanical anal., 73-4254; *Quseir-Safaga area*, phosphatic sediments, genesis, 73-1477, 1478; *St. John's I.*, scapolite-cancrinite association, 73-4032; *Sinai*, Carboniferous sandstones, petrol., 73-4253; *Um Bogma*, Mn ore, geol., origin, 73-2496; *Um Gerifat*, iron ochre deposit, geochem., 73-3786; *Wadi Karim-Wadi Dabbah area*, U mineralization, 73-3598
- Ehrwaldite, compared with microsyenite, 73-867
- Eichstätt, Bavaria v. Germany*
- Eitelite, *Utah*, crystallography, structure, 73-3500
- Ekanite, *Quebec*, crystal structure, 73-1298, data, 73-2802
- El Dorado, Kansas, v. USA*
- El Gidida v. Egypt*
- El Paso, Texas, v. USA*
- Elastic anisotropy, in mins., 73-3214
- Elba v. Italy*
- Elbow Lake, Manitoba v. Canada*
- Elbow Lake, Ontario v. Canada*
- Eldorado Fay mine, Saskatchewan v. Canada*
- Electrical conductivity, lunar rock, 73-616, lunar profile, 73-617
- Electromagnetic frequency sounding, in marine environment, 73-2172
- Electron microprobe, state of the art, 73-39
- analysis, at low operating voltage, 73-1181; computer programme for plotting elemental profiles, 73-1182; quantitative, using Li-drifted Si detector, 73-3347
- Electron microscopes, state of the art, 73-39
- Electron microscopy, of mica-vermiculites, extinction bend contours, in, 73-40; sense of boundary inclination determination, 73-1152; transmission preparation of ultra-thin rock sections, 73-41
- Electrum, *France*, in Pb-Zn ores, 73-1891
- Elements, evolution of, 73-469
- Elizabeth mine, Vermont v. USA*
- Elkhorn Mts., Montana v. USA*
- Ellsworth Land v. Antarctica*
- Elpidite, *Quebec*, crystal structure, 73-2369
- Emeralds, colour photos, 73-2630; reputedly from *Zambia*, data, 73-2631; valuation principles, 73-466; *Colombia*, mining history, 73-2632; *N. Carolina*, 73-3249, occurrences, 73-457
- Emmonsite, crystal structure, 73-3480
- Emperor mine, Fiji v. Pacific Ocean*
- Emplectite, *USSR*, 73-1945
- Emuford, Queensland v. Australia*
- Enargite, in system Cu-As-S, 73-1569
- Endellite v. halloysite
- Enderbury I., Phoenix Is. v. Pacific Ocean*
- Enderby Land v. Antarctica*
- Eneabba, W. Australia v. Australia*
- Engineering geology, preparation of maps & plans, 73-3263
- ENGLAND, fuller's earth, occurrence, uses, 73-3442; localities for fluorite specimens, 73-3238; salt resources, 73-3627; W reserves & production, 73-3506; central &

- east, Caledonian igneous rocks below, 73-1976; *Cheviot Hills*, K-Ar ages, 73-2197; *Lake District*, age of Eycott volcanic group, relation to Skiddaw Slate, 73-2196, almandine-pyrope phenocrysts in Borrowdale volcanics, genetic significance, 73-860, geol., excursions, 73-1952; *Malvern Hills*, igneous complex, petrog. & chem., 73-1975, correlation with Uriconian & Charnian rocks, 73-1974; *Midlands*, porcellaneous rocks & reddening of coal measures, 73-3111; north, B & other elements in Namurian shales, 73-523, min. collecting sites, 73-1084, Whin Sill dolerite, chem. anal., melting relations, 73-1524; north-west, tectonic history, 73-2023; *Pennines*, lead mine occurrence, statistical appraisal, 73-1370, preservation of Neogene formation, 73-2078; south, Cretaceous fuller's earth, sedimentation, petrogenesis, age, 73-1234, silica diagenesis in Upper Jurassic limestones, 73-3112; south-west, basic & acidic rocks, geochem., origin, tectonic environment, 73-2024, model for development of greenstones & granite, 73-2970, quartz porphyry dykes, petrogenesis, 73-2025, spilitic greenstones, geochem., 73-4184; the *Wash*, Quaternary sediments, clay min., 73-3431; *Whin Sill*, prehnite in contact metamorphic aureole, 73-2848
- , CORNWALL, high Sn concentrations in stream sediments, 73-3527; *Bude-Tintagel*, geol. of coast, 73-2969; *Cligga Head*, greisenization in granite, 73-1662; *Cudden Point*, greenstone, petrol., chem. data, 73-3167; *Geevor*, wall rock alteration in Sn mine, 73-2659; *Lizard*, peridotite, primary igneous texture, 73-1978; *Newquay*, spilitic dyke, chem. anal., 73-4140; *Pendower*, Devonian meta-anthracitic coal, 73-2082; *South Crofty mine*, Mn/Fe ratios in wolframite, 73-1911, 1912
- , CUMBERLAND, *Melmerby*, age of olivine-dolerite intrusions, 73-1117; *St. Bees*, evaporites, 73-2077
- , DERBYSHIRE, cluster anal. in geochem. prospecting, 73-2308; fluorspar mining potential, 73-1473; interbedded clays, min., origin, 73-1235; north, bitumens associated with Pb-Zn-fluorite ore mins., 73-3777; *Ashford black marble mine*, polyphase mineralization in chert, 73-2080; *Monsal Dale*, Carboniferous Limestone geol., 73-4101; *Whitwell*, baryte-galena vein, 73-1414
- , DEVON, Permian volcanics, geochem., 73-515; *Dartmoor granite*, frequency distributions of Na, K, SiO₂ & Cl, 73-2674; *Exeter*, spilitic-keratophyre suite, differentiation & metasomatism, 73-1977; *Meldon aplite*, Li-Al micas, chem., opt., phys., X-ray data, 73-4017
- , DURHAM, *Rookhope*, supergene native Cu, 73-4359
- , GLOUCESTERSHIRE, radon release in rock matrices & entry into groundwaters, 73-1714
- , HERTFORDSHIRE, surface textures of sand grains from pebble gravels, 73-972; *South Mimms*, petrog., origin of deposits in solution pipes in Chalk, 73-193
- , KENT, *Tunbridge Wells*, geol., 73-2081
- , LEICESTERSHIRE, Charnian rocks, geochem., correlation with Warren House & Uriconian, 73-1974
- , NORFOLK, *Cromer*, clay min. of North Sea drift, 73-3404
- , NORTHUMBERLAND, *Throckley*, exsolution lamellae in pyroxenes of Whin Sill, 73-1811

- , NOTTINGHAMSHIRE, baryte as cement in sandstone, 73-4236
- , SHROPSHIRE, *Aldress*, bentonitic clay min., 73-192
- , SOMERSET, radon release in rock matrices & entry into groundwaters, 73-1714; *Brent Knoll*, rock salt from borehole, 73-2525
- , STAFFORDSHIRE, K-bentonites, description, origin, 73-1237; min. of tonsteins, 73-1236; *Walton's Wood*, landslide investigations, 73-1270
- , SURREY, *Guildford*, chalcedony occurrence, 73-2176
- , WESTMORLAND, *Shap granite*, origin, 73-3063; *Tarn Moor Tunnel*, geol., 73-2967
- , YORKSHIRE, *Greenhow-Skyreholme area*, S & Pb isotopes in galena, 73-493; *Horton in Ribblesdale*, age of Ingletonian, 73-3280; *Main Colliery*, spoil heap phys., mechanical props., 73-3237; *Sheffield*, Mansfield Marine Band cyclonemite, petrog., 73-2079
- Enisei, Russian SFSR v. USSR*
- Eniwetok Atoll v. Pacific Ocean*
- Enstatite v. pyroxene
- Eosphorite, *Maine*, 73-4367
- Epididymite, dimorphic relationship with eudidymite, 73-1293
- Epidote, Al-Fe, thermal stability, 73-1589; fission track annealing, 73-341; *Austria*, crystal structure, 73-3455; *Czechoslovakia*, with high Cr content, 73-687; *Iceland*, formation in geothermal area, 73-1003; *Italy*, specimens, 73-3240; *Tyrol*, Fe content, in metamorphic rocks, 73-2816
- Epitaxy data, of inorganic and organic crystals, book, 73-91
- Epsomite, *New Jersey*, 73-4370
- Erciyes, Anatolia v. Turkey*
- Eremeevite, indexed X-ray powder data, cell parameters, 73-1553
- Ergani v. Turkey*
- Erquy, Côtes-du-Nord v. France*
- Erythrite, *Ontario*, supergene min., 73-3561
- Erzgebirge v. Germany*
- Esh El Mellaha v. Egypt*
- Eskisehir v. Turkey*
- Espaly, Haute-Loire v. France*
- Espanade Range, B.C. v. Canada*
- Essex County, Vermont v. USA*
- Esterhazy, Saskatchewan v. Canada*
- Estola v. Mexico*
- Estremoz v. Portugal*
- ETHIOPIA, granulites in basement, 73-411; tectonic history of Rift, 73-2169; *Afar* tectonics, 73-4191; *Afar Rift*, Fe-Mn-B deposit, marine sedimentary, 73-3783; *Danakil*, potash-bearing evaporites, 73-1479, 1480
- Erla, Oaxaca v. Mexico*
- Ettringite, chromate substitution in, 73-2579
- Eucla, W. Australia v. Australia*
- Eucryptite, formation from kaolin & Li₂CO₃, 73-422; *Manitoba*, in pegmatite, 73-2869
- , β -, average & super structure, 73-1311; low & high T forms, structural relationship with low & high quartz, 73-1309, 1310; thermal expansion of lattice constants, 73-753
- Eudialyte, *Quebec*, chem., opt., X-ray data, 73-2933
- Eudidymite, crystal structure, dimorphic relationship to epididymite, 73-1293
- Euphrates R. v. Iraq*
- EUROPE, Lower Permian rocks, 73-978; peridotite provinces, geotectonic implications

- EUROPE, (contd.)
 tions, 73-2027; *central*, Cretaceous-Pleistocene volcanic province, 73-865; *east*, comparison of U deposits with *Canada*, 73-277; *western*, regional geochem. variation in Caledonian & Variscan granites, 73-501; *Baltic Shield*, age of carbonatites & alkaline complexes, 73-3276; K-Ar geochronology, 73-3277; Precambrian geochronology, 73-3274; Rb-Sr geochronology, 73-3275; *Bohemian Massif*, age & origin of detrital zircon in pre-Permian basement, 73-3283
 europium, anomaly in plagioclase, 73-3762; luminescence of Eu^{2+} activated $\text{SrB}_2\text{Si}_2\text{O}_8$, 73-1582; *Brittany*, in monazite nodules, 73-3629
 -oxide, *California*, in carbonate-baryte orebody, 73-3655
 -ulysite, *Russian SFSR*, min., 73-3182
 -uxenite, *Norway*, Sn content, 73-765
 -vapourites, *Brazil*, containing tachyhydrite, 73-2937; *Cumberland*, 73-2077; *Ethiopia*, K-bearing, 73-1479, 1480; *Ireland*, sedimentary petrol., 73-4234; *Trucial Coast*, modern deposition, geochem. of coexisting brines, 73-3851
 -veite, *New Jersey*, 73-4370
 -vros v. *Greece*
 -xuma Sound, *Bahamas* v. *West Indies*
 -zcurrite, crystal structure, 73-2415
- aeoroe Is. v. Atlantic Ocean*
Air Isle, Shetland Is. v. Scotland
Airfax Quarry, Centreville, Virginia v. *USA*
Airfield, Utah v. *USA*
Airfieldite, S. Dakota, first report, 73-3649
Aiyum v. *Egypt*
Alun v. *Sweden*
amatinite, crystal structure, 73-3490
Amannich Forest, Ross-shire v. Scotland
Arallan Negro, Catamarca v. Argentina
assaite v. *pyroxene*
atty acids, catalytic formation of hydrocarbons from, 73-1687; *Queensland*, in shale, 73-1728; *Rhode I.*, in recent sediments, biogeochem., 73-3836
aujasite, formation from halloysite using NaOH, 73-446; *Germany*, dehydrated Ca-exchanged, crystal structure, 73-2396
aults, India, 73-941
auling, Siberian platform, in fold belt around, 73-2970
ay mine, Saskatchewan v. *Canada*
ayette County, Texas v. *USA*
elbertal, Ostalpen v. *Austria*
eldspars, activity-composition relations, 73-1613; ammonium, formation & stability conditions with NH_4 -mica, 73-1501; authigenic, from dolomitization of illitic limestones, 73-4230; authigenic in sandstone, 73-4258; crystal growth at high *P*, 73-1619; germanate, high-*P* transformation, 73-1614; lead, Al, Si configurations, in, 73-3472; lunar, composition, X-ray data, 73-3931; orientation of joining planes in exsolved components, 73-1308; rubidium iron, crystal structure, 73-2387; schiller, microtextures, 73-1843; stability & palaeoclimatology, 73-3840; *Iceland*, zoned ternary, chem., opt. data, 73-1841; *Manitoba*, in Tanco pegmatite, 73-2872; *Nigeria*, origin of megacrysts in alkali basalt, 73-871, 3034; *Poland*, in metamorphic series, 73-4022; *Pakistan*, min. & ceramic properties, 73-3638; *Romania*, micrographic intergrowths with quartz, 73-718; *Russian SFSR*, Na-K, rare alkalis & triclinicity in, 73-1839
 —, *adularia*, crystal structure, 73-3471
 —, *albite*, dislocation distributions, 73-4004; *Belgium*, in pelitic rocks, X-ray powder data, 73-4327; *Italy*, correlation with analcite in "pietra verde", 73-727; *Poland*, authigenic in limestone, twinning, 73-2856
 —, *alkali feldspar*, Al, Si distribution estimation, 73-2386; correlation of IR absorption spectra and chem. comp., 73-709; derivation of ordered series & excess free molar enthalpy, 73-433; Na-K mixing & polymorphism, 73-430; spinodal behaviour in, 73-432; *Finland*, in rapakivi granite massif, 73-710
 —, *andesine* *Italy*, albite-Carlsbad twin in mica schist, opt. data, 73-4024; *Switzerland*, unusual high-T optics, 73-4025
 —, *anorthite*, changes in domain structure by heating, 73-3747; displacement vectors of antiphase domain boundaries, 73-3474; enthalpy of crystallization, 73-1496
 —, *bytownite*, *Iceland*, in olivine basalt, opt. chem. data, 73-1848
 —, *celsian*, *California*, 73-4372
 —, *cleavelandite*, *California*, distribution in mining area, 73-4128; *India*, in pegmatite, 73-663; *Maine*, 73-4367; *S. Dakota*, 73-2538
 —, *cryptoperthite*, *Wisconsin*, exsolution corresponding with diagonal assoc., 73-2388
 —, *K-feldspar*, classification of polymorphs, 73-2849; distribution of alkalis in, in granitoids, 73-2852; equilibrium with quartz & muscovite, 73-431; in shoshonitic association, chem., 73-672; myrmekite-like intergrowths in larvikite, 73-717; + tremolite + H_2O + CO_2 = phlogopite + calcite + quartz, 73-2614; X-ray triclinicity in chamber pegmatites, 73-2850; *Finland*, in contact aureole, 73-711; *Italy*, structural variants in granite, 73-4023; *Manitoba*, coloured, 73-2853; *Russian SFSR*, triclinicity & ordering, 73-1838; *Sweden*, X-ray obliquity in granites, 73-2851; *Wyoming*, with analcite in tufts, 73-2871
 —, *labradorite*, standard free energy of formation, 73-311
 —, *microcline*, orbital ionization energies for Al, 73-1280; quantitative anal. using SEM with energy dispersive X-ray analyser, 73-3350; standard free energy of formation, 73-311; *Urals*, phenocrysts in granitoids, composition, 73-1840
 —, *oligoclase*, *New Zealand*, myrmekites in schists, 73-4027
 —, *perthite*, *Norway*, in nepheline syenite pegmatite, 73-1842
 —, *peristerite*, with blue schiller, 73-1845
 —, *plagioclase*, -amazonite, 73-1849; calcic, X-ray powder technique to determine structural state, 73-2389; cell parameter studies, 73-1844; changes in crystal morphology and habit in zoned, in thin section, 73-714; Eu anomaly in, 73-3762; experimental deformation lamellae, 73-847; fission track annealing, 73-341; in shoshonitic association, chem., 73-672; laboratory dissolution, 73-1617; lunar, opt., chem. anal. of Fe, 73-2773; one-parameter characterization of average Al/Si distribution, 73-1847; optic axial & refr. ind. measurements, 73-1148; optical orientation, 73-1147; order-disorder relations in natural & heated, 73-3746; -pyroxene reaction zones in granulite facies, 73-4316; sodic, tetrahedral bond lengths, 73-3473; stability at high *T*, 73-4193; use of Rittmann zone method, 73-32; *Australia*, in ultramafic intrusion, 73-2854; *Brazil*, chem. changes in amphibolite, 73-2858; *California*, equilibria in contact metamorphic aureole, 73-1846; *Hungary*, twins in andesite, 73-2857; *India*, interpenetration twins in basic dyke, 73-4026; *Ireland*, in gabbro, geochem., 73-713; *Manitoba*, zoned, microprobe, opt. anal., 73-2855; *New South Wales*, -spinel intergrowths in alkali basalts, 73-2859; *S. Africa*, compositional variation, 73-717
 —, *sanidine*, & coexisting phlogopite, K & Rb distributions, 73-3745; effect of heat treatment on Si, Al distribution, 73-3470; low, crystal structure, 73-3471; *France* Nevada twin, new occurrence, crystal structure, 73-2385; *Switzerland*, unusual high-T optics, 73-4025
Felsite, Antarctica, age 73-1137; *Ireland*, petrol., 73-1971; *Michigan*, age, 73-1141
Fen v. *Norway*
Feni v. *Bangladesh*
Fenites, Sr distribution in, 73-489
Fenitization, changes in magnetite content & fabric during, 73-2028; in mafic rocks, 73-4306; *India*, of basalts & dolerites, 73-4315
 FENNOSCANDIA, nature & structure of Earth's crust, 73-3219; regional magnetic anomalies & geol., 73-2957
Fergana, Uzbek SSR v. *USSR*
Ferricrete, nature of, 73-2307
Ferri-sicklerite, Ghana, in pegmatite, 73-1816
Ferrite, crystal structure, 73-2406; grinding effect & hydrothermal action on formation, 73-369
Ferrohastingsite v. *amphibole*
Ferrolites, Czechoslovakia, chem., DTA, TGA curves, 73-1904
Ferropargasite v. *amphibole*
Ferroselite, in system FeS_2 -FeSe, 73-377
Fibrolite, relationship to sillimanite, 73-1798
Fichtelgebirge v. *Germany*
Fiji v. *Pacific Ocean*
Filicudi I. v. *Italy*
Finistère v. *France*
 FINLAND, Åva, remanent magnetization of intrusives, 73-2; *Hämeenkylä*, clinohumite, crystal structure, 73-2362; *Hirvas*, magnesia metasomatism, 73-1025; *Lappland, Porkonen-Pahtavaara* area, volcanic complex & Mn iron ores, 73-856; *Siilinjärvi*, geol. of carbonate complex, 73-855; *Wiborg*, alkali feldspars in rapakivi granite massif, 73-710, K feldspars in contact aureole, 73-711
Finnmark v. *Norway*
Fireclay, refractory, control tests at plant, 73-3396; *USSR*, min., 73-2327; *Wales*, resources, industry, 73-1371
Fishtail Lake, Ontario v. *Canada*
Fiskeneset v. *Greenland*
Fission track, etching, 73-2298; methods in geochem. exploration, 73-2308; systematic in annealing of minerals, 73-341
Flagstaff Hill, California v. *USA*
Flame emission spectroscopy, analytical scheme for Li, Rb, Cs, Ba, Sr, 73-49
Flin Flon, Manitoba v. *Canada*
Flinders I., Tasmania v. *Australia*
Flinders Ranges, S. Australia v. *Australia*
Flinkite, New Jersey, 73-4370
Flint, decomposition of, 73-2867; *Germany*, genesis, 73-4239
 —clay, *Mexico*, by hydrothermal alteration

Flints, clay, (*contd.*)
of shale, 73-205; *Scotland*, Ayrshire bauxitic clays, 73-179

Flint Creek Range, *Montana* v. *USA*
Florida v. *USA*

Flotation, computer controlled plants, 73-3522; of sulphide ores in sea-water, 73-3525

Flow element, model, 73-3158

Flow-folding, dynamic anal., nomenclature, 73-4091

Fluid inclusions, composition, review, 73-480; proceedings of COFFI 1969, 73-481; Fluoride, determination in soils & stream sediments, 73-2308

Fluorides, crystal structure & symmetry, 73-2443

Fluorine, determination, in biotite by microprobe, 73-64, in silicate rocks, 73-45; HF/SiF₄ ratios in volcanic & magnetic gases, 73-2739; spectroscopic, in standard rocks, 73-79

Fluorite, blue coloration, cause, 73-802, 803, 2936; calculation of probable homogenization temperatures of inclusions, 73-1870; colourless octahedron, 73-2642; IR studies of adsorption of oleates, 73-1190; localities for specimens, 73-3238; NAA of fluid inclusions, 73-2671; visible & near-IR spectra, 73-1066; yellow, crystallization temperature, 73-1869

— deposits, *Appalachians*, distribution, 73-1394; *California*, 73-3657; *Derbyshire*, mining potential, 73-1473; *Germany*, origin of mineralization, 73-3630; *Idaho*, 73-851; *Mexico*, stratigraphic control of deposits, 73-293; *Nevada*, 73-2523; *New Mexico*, specimens, 73-3252; *Sardinia*, karst concentration, 73-3533; *Utah*, deposits, 73-2509

Fluoroaluminates, some crystallochem. features, 73-3482

Fluoro-chemical industry, world review, 73-1475

Fluorophlogopite v. mica
Folding, chem. influence on styles, 73-1411

Foot mine, *N. Carolina* v. *USA*
Forsyth, Quebec v. *Canada*
Fortaleza City v. *Brazil*
Fort-Trinquet v. *Mauretania*

Fossil wood, mineralization, 73-3255

Fossilization, of Triassic vertebrate bone, 73-4380

FRANCE, augite from Massif Central as stratigraphic indicator, 73-975; distribution of alkaline elems. in biotite & muscovite of granitic rocks, 73-688; Lower Permian rocks, 73-978; *Aquitaine*, microfacies of Jurassic, 73-2087; *Aquitaine basin*, origin of Quaternary sediments, 73-2086, thermal evolution of asphalt, 73-548, waters with low concentration of salts, 73-1722; *Auvergne*, rhönite-bearing melaphonolite, modal, chem. anal., 73-1825; *Brittany*, monazite nodules with high Eu₂O₃, 73-3629; *Cevennes*, thermoluminescence of quartzite, 73-4028; *Gironde estuary*, circulation of sea-water, 73-976; *Lorraine*, formation of minette ore, 73-1360; *Massif Central*, Cainozoic intermediate lavas, nature & origin, 73-1979, Sb-bearing veins, stratigraphy, structure, 73-3528, white micas in low-grade schists, EM anal., 73-2841, wolframite deposit, structure, 73-3591, *Montagne Noire*, age of granitic massif & acid volcanics, 73-2198; *Paris, Sorbonne*, min. collection, 73-3266; *Provence*, alteration of cordierite in granite & related soil,

73-664; *southeast*, origin of karstic bauxites, 73-300; *AIN, Belley*, laminated sediments, genesis, 73-974; *AISNE, Thiérache*, clays, X-ray diffraction, microscopy, chem. anal., 73-3436; *ARIÈGE*, sapphirine-bearing rocks at Iherzolite contact, genesis, chem. anal., 73-1802, *Montseron*, min. of bauxites, 73-752; *AVEYRON, Larzac*, age of intrusions, 73-4, *Valzeques*, colour of fluorites, blue, 73-2936, yellow, 73-1869; *BAS-LIMOUSIN*, kyanite in mica-schist & gneiss, 73-2121; *BOUCHES-DU-RHÔNE*, min. of Mn in karst deposits, 73-2885; *CANTAL*, mineral localities, 73-2177; *CÔTES DU NORD, Erquy*, new anal. of spilic series, 73-863, *St. Jacut-de-la-Mer*, age of St. Malo migmatite belt, 73-1057, *Saint-Quay-Portrieux*, diorite, age, 73-1119; *FINISTÈRE*, age of basic dykes of Armorican massif, 73-1118, *Chateaulin*, crystallinity of micas in pelites, 73-2102, *Morlaix*, Hercynian metamorphism, 73-3168; *HAUTE-LOIRE, Bournac*, sillimanite from inclusions in basaltic tuff, 73-1797, *Chavanac*, blue fluorite, 73-2936, *Espaly*, age of basaltic andesites, 73-3281, *Le Puy*, pure illite, data, 73-3407, *Velay*, cordierite in granite, petrogenesis, 73-1806; *HAUTES-ALPES*, mineral localities, 73-2178; *HAUTES-PYRÉNÉES, Néouville massif*, orbicular gabbro, 73-3021, *Pierrefitte*, argentiferous mins. in Pb-Zn ores, 73-1891, coexisting sphalerite & pyrrhotite, EM & X-ray studies, 73-1881; *HAUTE SAVOIE*, deep seated pre-tectonic metamorphism, 73-2123; *HÉRAULT, Lodève*, meta-lodevite, new mineral, 73-1940, *Montagne Noire*, heavy mins. in Stephanian sediments, 73-3114, *Montpellier*, calcareous rocks, silicate mins., petrogenesis, 73-1242; *ILLE-ET-VILAINE, Bonnemain*, granite petrog., 73-862; *LIMOUSIN, tschermakitic hornblendes* in diorites, 73-676; *LOIRE ATLANTIQUE, Rouge*, iron deposit, 73-3592; *MANCHE, Petit Trégor*, sea-floor petrog., 73-824; *MORBIHAN, Île de Groix*, parageneses in schist, 73-2122, *Questembert*, petrographic & geochemical variations in two-mica granite, 73-861; *PUY-DE-DÔME, Mont Dore*, new occurrence of sanidine Nevada twin, crystal structure, 73-2385, *Montferrand*, recent ash fall, 73-3082; *PYRÉNÉES-ORIENTALES, Agly*, granite, age, 73-2199, *Batère*, origin of siderite deposits, 73-2494; *VAR*, min. of Mn in karst deposits, 73-2885, *Maures massif*, quartz, thermoluminescence, 73-1852; *VENDEE, north*, eclogites, chem., 73-2120; *VOSGES, Bärenkopf*, unusual high-T optics in feldspars in porphyry, 73-4025, *Barr-Andlau*, polymetamorphism, petrog., chem. anal., 73-1014, *Moyenmoutier massif*, petrog., petrogenesis, 73-864, *Rosberg*, porphyritic andesites, X-ray anal., 73-68

—, *CORSICA, Inzecca*, bedded silicites, petrol., 73-4238

Franceville Basin v. *Gabon*
Franceville, Gabon, in Sorbonne collection, 73-3266

Frankieite, California, 73-4372

Frankolite, in fossil bones, 73-2924

Frankfort, Kentucky v. *USA*
Franklin, New Jersey v. *USA*

Freibergite, crystal structure, 73-1334; *France*, in Pb-Zn ores, 73-1891

Freieslebenite, France, in Pb-Zn ore, 73-1891

Frisco Mts., Arizona v. *USA*

Frolovite, crystal structure, 73-237

Frondelite, Ghana, in pegmatite, 73-1816

Front Range, Colorado v. *USA*
Frontenac axis v. *Canada*

Froodite, Ontario, opt. phys. props., 73-289

Frost action, permafrost & geomorphology book, 73-3369

Fukuoka v. *Japan*

Fukushima v. *Japan*

Fuller's earth, active clay mins., 73-3443; *England*, occurrence, use, 73-3442, sedimentation, petrogenesis, age, 73-1234

Fülpöppite, semseyite-, homologous series, 73-775

Furnace, for heating up to 1000°C at low pressures, 73-1159

Furotoke, Akita v. *Japan*

Fusamata, Fukushima v. *Japan*

Fuscald, Calabria v. *Italy*

Fusion, partial, geometric anal., 73-310

Fusion curves, of solids at high P, 73-3659

Gabbro, hornblende, with amygdaloids, significance, 73-2016; rock-types as host for magmatic ore deposits, 73-246; *Antarctic*, chem. trends, 73-514, density of layered intrusion, 73-3059; *Atlantic Ocean*, Rb distributions, 73-2681; *Bohemia*, ocellar texture in, 73-868; *Greenland*, size-grade layering in, 73-913; *Hautes-Pyrénées*, orbicular, 73-3021; *Iceland*, size-grade igneous layering, 73-3061; *Japan*, petrog. chem., 73-900; *Montana*, pseudo-rhythm layering in lacolith, 73-2041; *New Zealand*, metasomatically altered, chem. anal., 73-4005; *Norway*, -amphibolite transitions, chem., 73-2721, chem., structure, 73-4136, timing & environment of emplacement, 73-1950; *Russian SFSR*, association with diorite & dolerite, 73-3028; Sr distribution, 73-2682; *Saudi Arabia*, layered, ages, 73-3035; *Switzerland*, high-P parageneses, 73-4308

Gabbro-amphibolites, *Atlantic Ocean*, petrogenesis, 73-3187

Gabbro-syenite, as product of metasomatic alteration, 73-1026

GABON, *Franceville Basin*, U mineralization, 73-3602; *Haut-Ogoe*, isotopic anomalies in U deposits, 73-3779, 3780, 3781; *Mounana*, torbenite, chervetite, francavillite specimens in Sorbonne collection, 73-3266

Gaboury Township, Quebec v. *Canada*

Gadolinite, Norway, Ca-rich, 73-65; *Russian platform*, first find in granite basement, phys., chem. properties, 2815

Gahnite, *Czechoslovakia*, in magnetite deposit, 73-2880, in stream sediments, 73-1903; *Ghana*, in pegmatite, 73-1816

Galaxite, absorption and atomic number correction in EM anal., 73-65

Galena, extraction of Pb metal, 73-3526; flotation by xanthates, 73-3518; morphology of nucleus, 73-1500; paragenesis with chalcocite & galena, 73-4051; recrystallization softening & hardening, 73-2564; *Bulgaria*, natural whiskers, 73-326; *Bushveld Igneous complex*, 73-750

France, Ag-bearing, trace elem. anal. 73-1891; *Idaho*, heating experiments on ore, 73-3692; *Italy*, microstructure reflectivity, microhardness, 73-1870; specimens, 73-3240; *New Mexico*, specimens, 73-3252; *Tunisia*, in staurolite, 73-260; *Wales*, in Mesozoic sedimentary rocks, origin, 73-1883; *Yorkshire*, S & Pb isotopes in, 73-493; *Yugoslavia*, specimens, 73-4362

Galena Hill, Yukon v. *Canada*

- Galicia v. Spain*
Galilee v. Israel
 Galkhaite, new mineral, 73-1936
Gal-Kyaha, Yakutia, Russian SFSR v. USSR
 Gallium, in chondrites, 73-3961; in Fe meteorites, XRF, 73-2283; isotopic & elemental abundance in meteorites, 73-577
 — borates, indexed X-ray powder data, cell parameters, 73-1553
Galloway v. Scotland
Galway v. Ireland
 Gamma-ray spectrometry, determination of 32 elements in rocks, 73-76; field determination of U & Th, 73-1188; instrument for sea- or lake-bottom surveying, 73-1187
Gamla Naefurholt v. Iceland
Gandghar range, Hazara v. Pakistan
Garbhani, Andhra Pradesh v. India
Garfield County, Utah, v. USA
Garhwal, Uttar Pradesh v. India
Gariyodi, Andhra Pradesh v. India
 Garnet, $\text{Ca}^{2+}\text{V}^{5+}$ -substituted, origin of magnetic inhomogeneity in, 73-2366; compositional change in metapelite, 73-3986; distribution in compacted sediments, 73-4233; Fe^{2+} & Mg partitioning with cordierite, 73-3731; filling by RE of crystallog. sites in structure, 73-3454; fission track annealing, 73-341; inclusions in diamond, 73-3068; Mössbauer spectra, 73-212; orthosilicate group containing Fe^{3+} ions, IR spectra, 73-1289; porphyroblast, shear plane fractures in, 73-4336; stability in pelitic compositions at high P & T, 73-402; stability with cordierite at high P & T, 73-2573; thermal expansion, 73-3209; X-ray emission microanal., 73-1795; zoning in, diffusion models, 73-3989; *Alps*, chem., opt. data, 73-1791; *Austria*, intermediate between almandine & grossular, EM anal., 73-1794, 3988, pyrope-rich, chem. anal., in garnet-pyroxenite, 73-3984; *California*, distribution in mining area, 73-4128; *Czechoslovakia*, anisotropic, in isomorphous andradite-grossular series, 73-3985, chem. comp. in metamorphics, 73-1792, in stream sediment, phys., structural data, 73-1903; *Ghana*, in pegmatite, 73-1816; *Greece*, in pegmatites, 73-655; *Ireland*, curious clusters, 73-653; *Ireland*, porphyroblasts with spherically arranged inclusions, 73-2968; *Italy*, specimens, 73-3240; *Lake District*, almandine-pyrope phenocrysts in Borrowdale Volcanics, genetic significance, 73-860; *New Caledonia*, in metamorphic rocks, composition, 73-2804; *N. America*, in provenance studies of tills, 73-4273; *Norway*, zoned, in eclogite, 73-652; *Quebec*, from carbonatite complex, EM anal., 73-2820; *Russian SFSR*, chrome-rich in kimberlites, paragenesis, 73-3983, in cortlandite-norite complex, chem. anal., 73-683; *S. Africa*, in kimberlite, related to diamond, 73-2805; *Spain*, composition & metamorphic grade, 73-1790; *W. Australia*, manganiferous, in metamorphosed Fe formations, 73-4000
 — almandine, oxidation with Fe-cordierite, 73-2608; shock wave compression, 73-3729; thermochemical parameters, 73-2553; *Czechoslovakia*, origin in andesitic rocks, 73-654; *Italy*, zoning, 73-2806; *Spain*, from biotite dacite, chem. anal., 73-1789; *Sweden*, magnetic structure, oxygen parameters, 73-217, magnetic field at nucleus, electrical field gradient, 73-218
 —, andradite, kinetics of hydrothermal synthesis, 73-1583; *Italy*, crystals of demantoid, 73-1085; andradite, *Yugoslavia*, specimens, 73-4362
 —, grossular, *Utah*, specimens, 73-3245
 —, grossular-almandine, *Czechoslovakia*, chem. composition in skarns, 73-1793
 —, hydrogrossular, *Norway*, fluorescent, 73-1796
 —, pyralisite series, correlation of IR spectra & composition, 73-3987
 —, rhodolite *N. Carolina*, occurrences, 73-457, 3249
 —, spessartine, *Belgium*, in pelitic rocks, X-ray powder data, 73-4327; *Elba*, in Sorbonne collection, 73-3266
 —, uvarovite, formation in solid phase reactions, 73-1584
 Garnierite, nature of, 73-4020, 4021; thermal transformations, 73-3744
 Garrelsite, *California*, 73-4376
 Garnonite, synthesis from calcite, quartz & kaolinite, 73-347
 Gas chromatography, a flame ionization detector at high P, 73-1194
 Gas, natural, *Siberia*, C isotopes & origin, 73-2737
Gaspé Peninsula, Quebec v. Canada
 Gaspéite, *W. Australia*, electron-probe data, 73-2921
Gaurangdi, W. Bengal v. India
Gebel gold mine v. Sudan Republic
Gebel Atud v. Egypt
Gebel Derhib v. Egypt
 Gedrite v. amphibole
Geevor, Cornwall v. England
Geisspfad, Valais v. Switzerland
 Gem deposits, *Sri-Lanka*, 73-2635
 Gemmology, & the law, 73-2647; forensic, photographic techniques, 73-2646
 Gemstones, changing the colours of transparent, 73-467; coloured, valuation principles, 73-466; dangers of ultra-sonic cleaning, 73-461; doublets & triplets, 73-461, 468; G. F. Herbert Smith, fourteenth edition, 73-1208; inclusions in, 73-2645; involved in legal cases, 73-465; refr. ind. by direct measurement, 73-462; Rocks, minerals & gemstones, book, 73-1200
Geneva, Colorado v. USA
 Geobarometry, hydration of cordierite, 73-3732; sphalerite, 73-1555
 Geochemical balance, 73-477
 — data, use of statistical & mathematical methods in interpretation, 73-1737, 1738
 — environment, & health, 73-2753
 — exploration, comparison of data with biogeochemical data, 73-3867; feasibility in permafrost, 73-566, 567; for tin, 73-3863; in soil surveys, 73-3869; 1972, symposium papers, 73-2308; random numbering system for samples, 73-3856; sampling variability of stream sediments, 73-2749; statistical interpretation, 73-3865; stream sediments, study of background variations, 73-3866; variability of samples, 73-3864; *Arctic*, by helicopter, 73-3861; *Canada*, using lake sediments, 73-3863; *Colorado*, use of As as indicator, 73-3858; *Poland*, Ni-Co-Cr association, 73-3859; *Wisconsin*, in Zn area, by spring sampling, 73-3860
 — processes, in ore formation, 73-2561; involving aqueous solutions, phase relations, 73-2558
 — standard samples, NIMROC, 73-575; sulphide-bearing ultramafic rock, 73-578; XRF determination of tr. elems., 73-1736
 — techniques, field tests for Ce, Y, 73-570; sampling problems in analytical lab., 73-1183; *Canada*, research, 73-571
 Geochemie, geochemical methods & data, new series, 73-474
 Geochemistry, handbook, 73-1212; of stable isotopes, 73-3361; organic, advances in, book, 73-90; review, 73-560
 Geodes, indicators of min. deposits, 73-2465; *Mexico*, SEM study of mins. in, 73-2184
 Geological collections, computer-based registration system, 73-82
 — complexity, statistical anal. applied to metallogenic studies, 73-1354
 — data, computer & manual anal., 73-3322
 — mapping, data storage & processing in, 73-2260
 — specimens, source location established by coordinates, 73-43
 Geology, environmental, book 73-3368; Larousse Encyclopaedia of the Earth, 73-1196; Penguin dictionary, 73-1213; sources of information for literature, 73-3364
 Geophysical research, *India*, 73-1081
 Geophysical Surveys, new journal, 73-2026
Georgia v. USA
Georgian SSR v. USSR
 Geosynclines, past & present concepts, 73-4086
 Geothermal anomaly, *USSR*, 73-1626
 Geothermal fields, *New Zealand*, isotopic composition of waters, 73-1716
 Geothermometry, amethyst colour, 73-2639; colour centres, 73-3452; minor elem. fractionation between galena & sphalerite, 73-1638; muscovite, 73-1827; noble gases in ground-waters, 73-2738; O isotopes in Proterozoic & Archaean granulites, 73-539; sphalerite, 73-1555
 Germanates, of Mg, Co, Ni, Zn, thermodynamics of formation, 73-1495
 Germanite, Mössbauer parameters for Fe (III), 73-3483
 Germanium, bacterial dissolution in galena, 73-1631; crystal growth in metal films 73-3660; in coal, relation to ash, 73-2702; in chondrites, 73-3961; in Fe meteorites, XRF, 73-2283
 GERMANY, boron mins. distribution, 73-303; mins. in speleothems, biochemical genesis, 73-478; Rotliegend, 73-978; south, Malm formation, O & C isotopes in dolomite & calcite, 73-1690; *Altensburg*, propopite, crystal structure, 73-3482; *Badgastein*, age of hydrothermal sinter, 73-1145; *Bavaria*, *Ebnath*, enrichment of tourmaline in metasedimentary rocks, 73-665, *Eichstätt*, dendrites, 73-3264, *Lam-Bodenmais*, andalusite-sillimanite metamorphism, zoning, 73-4328, *Münchberg*, zoisite, amphibole & white mica in eclogite, 73-2818, *Wondrehs*, coexisting varicoloured biotites in migmatitic rocks, 73-4008; *Black Forest*, differentiation of granites, 73-1956; *Bodensee*, *Untersee*, sedimentary basins, 73-3116; *Clausthal*, stibnomelane with ilvaite, EM anal., 73-1837; *Erzgebirge*, Sn metallogenetic indicators, 73-2466; *Fichtelgebirge*, biotite, chem., 73-1830; *Görlingen*, grolite, okenite, tacharanite as metasomatic products, 73-1006; *Harz Mts.*, *Grund*, S isotopes in Pb-Zn deposit, 73-3772, *Löbauer Berg*, rhönite, chem., opt., X-ray data, 73-1825, *Rieckensglück*, Fe-hornfels, petrol., 73-4303, *Ries*, polymict crystalline breccias, petrog., shock metamorphism, 73-645, shock-induced mechanical deformations in biotites, 73-1776

GERMANY, (contd.)

shock produced rock glasses, 73-1775; *Siebert*, Sr-containing baryte, solubility, 73-382; *Hocheifel*, fassaitic augite in alkali basalts, 73-4143; *Holstein, Lägerdorf*, chalk, porosity & CaCO_3 content, flint genesis, 73-4239; *Lahn*, source of Fe in ore deposits, 73-3530; *Landau, Albersweiler*, lampophyres, min. parageneses, 73-677; *Mainz-Weisenau*, high-Mg calcite in Lower Miocene, 73-784; *Niederrhein*, brown coal & its ash, min., 73-1518; *Odenwald*, basic igneous rocks, geochem., petrog., origin, 73-3798, migmatites, petrol., 73-1058, prehnite in basic plutonics, 73-708; *Pfalz, Oberrmoschel*, schachnerite, para-schacherite, new minerals, 73-1941; *Rhine graben area*, age of Tertiary volcanics, 73-1120, argillaceous sediments, initial porosity related to palaeosalinity, 73-4240, plate tectonics & transform faulting, 73-2026; *Saar-Nahe trough*, Permian tholeiites, origin & crystallization history, 73-3680; *Schwarzwald*, fluorspar mineralization, origin, 73-3630; *Siebengebirge*, Tertiary volcanics genesis, 73-3083; *Stassfurt*, kainite, crystal structure, 73-1327; *Thuringia, Arten*, melilite, crystal structure, 73-2422

Gerrei, Sardinia v. Italy
Gersdorffite, Bushveld complex, 73-756;
Czechoslovakia, high lattice constant, 73-769, reflectivity, 73-4056, *Ontario*, anal., 73-3554; *Spain*, (Fe, Co)-rich, 73-770

Geyser activity, related to 18-6-year Earth tide, 73-969

GHANA, Au-bearing palaeoplacer, sedimentology, 73-2299; *Accra Plains*, gneiss, metamorphic facies in, 73-4335; *Saltpond area*, spodumene pegmatites, geochem., 73-1816

Ghundali Tarako v. Pakistan
Giant Mt., New York v. USA
 Gibbs, & boehmite stability, 73-3380; crystallization, 73-1552; ferriferous, structure problems, 73-4048; free energy of formation & aqueous solubilities, 73-1548; persistence in deep sea sediments of Tertiary, 73-983; *Alabama*, in weathered granitic rocks, 73-3413; *N. Carolina*, formation, 73-1256; *Tasmania*, 73-1091; *Washington*, formation in alpine environment, 73-206

Gifu v. Japan
Gila County, Arizona v. USA
Giles, S. Australia v. Australia
Gillespie Lake, Yukon v. Canada
Ginovci v. Yugoslavia
Gironde estuary v. France
 Gismondine, synthesis of beryllsilicate with this structure, 73-3733

Glaciation, *Antarctica*, evidence for early Tertiary, 73-2218; *Siberia*, late Pleistocene, ^{14}C ages, 73-1126

Glarus Alps v. Switzerland
 Glaserite, crystal structure, 73-2363

Glass, borosilicate, determination of borate, 73-3340; dissolution of Al_2O_3 in $\text{Na}_2\text{O}-\text{SiO}_2$ melt, 73-1514; gas chromatographic analysis of bubbles in, 73-61; hydroxyl-groups in structure of quaternary $\text{SiO}_2-\text{B}_2\text{O}_3-\text{CaO}-\text{Na}_2\text{O}$, 73-1513; in shoshonitic association, chem., 73-672; lunar, major elem. chem., 73-3875, sphere formation, 73-3900; of plagioclase-like, composition, 73-2621; preceding phenomena of crystallization, 73-1620; rapid anal. by AAS, apparatus, 73-3323; silica & germania, crystalline ordering in, 73-2391; silica, tridymite-like structure in, 73-2390;

thermal properties at low T , 73-3452; *Pacific Ocean*, objects in deep sea clays, 73-2986

Glaucodot, arsenopyrite-, zoned min., X-ray microprobe anal., 73-760; *Ontario*, anal., 73-3554

Glaucinite, definition, 73-2843; experimental conversion to smectite, 73-1231; index of refraction & density, 73-1832; type, extent and mode of $10 \text{ \AA} / 14 \text{ \AA}$ interlayering in, 73-111; water in, 73-112; *Czechoslovakia*, c.e.c., 73-1223; *Gulf of Guinea*, formation in sediments, 73-202; *New Zealand*, in oceanic sediments 73-3418

Glaucinite sand, *New Jersey*, 73-3243

Glaucinitic rocks, *Switzerland*, progressive metamorphism, 73-3173

Glaucophane v. amphibole

Glen Coe, Argyll v. Scotland

Glen Gairn, Aberdeenshire v. Scotland

Gloucestershire v. England

Gneisses, & granitoid rocks, K/Rb fractionation in, 73-1705; atlas of textural patterns, 73-3356; high grade complexes, effects of reworking on, 73-3157; *British Columbia*, petrol. & structure of dome, 73-1033; *Czechoslovakia*, chem. of cordierite, 73-1807; *Ghana*, metamorphic facies, 73-4335; *India*, petrog., 73-934, stability of zircon, 73-648; *Italy*, O isotopes in mins., 73-540; *Japan*, chem. reaction with amphibolite, 73-1039; *Norway*, age, 73-115; *Ontario*, origin, 73-2720; *Poland*, feldspar development in complex, 73-4022; *Portugal*, geol., petrog., 73-2136, folded, structure, 73-2134, peralkaline, petrog., chem., 73-2135; *Saskatchewan*, & associated pegmatite, ages, 73-3294; *Sweden*, fleck, evolution, 73-3159; *Taiwan*, age, 73-1127; *Zaire*, ages, 73-2207

Goat Island, *Tasmania v. Australia*

Goe Range v. *Liberia*

Goethite, effect of milling on, 73-1550; influence of silicate on transformation from lepidocrocite, 73-146; transformation from lepidocrocite, 73-375; *Michigan*, botryoidal, 73-1102; *Montana*, locality, 73-1103; *Turkey*, EM examination of morphology, 73-753

Gold, content in mins. of intrusives, 73-3793; determination in phosphates by NAA, 73-1185; determination of Ag in natural Ag-Au alloys, 73-3320; determining fineness variation characteristics in ores by reflectometry, 73-1151; evaluation of placer deposits by NAA, 73-2308; experimental simulation of deposition in gravel beds, 73-263; hydrothermal transport & deposition, 73-1357, 1358; native effects of laboratory treatment on Ag & other elements in, 73-2274, growth & subsequent change in crystals, 73-1866; thio complexes & transport in hydrothermal ore systems, 73-3666; size & shape of grains, 73-2299; world history, 73-3262; *Alaska*, geochem. anomalies, 73-285; *Colorado*, content in natural waters, 73-552, distribution & abundance, 73-564; *Egypt*, in quartz-wolframite vein, 73-3599; *Guyana*, in placers, 73-754; *Manitoba*, NAA in Archaean rocks, 73-1385; *Montana*, mining, 73-1401; *Nevada*, c.e.c. by phyllosilicates in concentration, 73-1646, 1647; *New Mexico*, resources, 73-3587; *New Zealand*, precipitates from thermal waters, 73-1448; *N. Carolina*, occurrences, 73-457; *Oregon*, unusual form, 73-1460; *Poland*, in sands, petrog.,

min., 73-4245; *Puerto Rico*, as guide to porphyry Cu deposits, 73-2308; *Russia SFSR*, form in pyrite deposit, 73-737; in lower Proterozoic strata, 73-270; *Spain*, mineralization & wall-rock alteration, 73-1415; *Swiss Alps*, distribution in various rocks, 73-3531; *Taiwan*, native crystal forms, 73-1867; *Uzbek SSR*, in pyrite & arsenopyrite, 73-2477; *Wales*, resources, 73-1371

— deposits, *Arizona*, placers, 73-241; *Bering Sea*, sedimentary, 73-1451; *California*, guide, 73-3585, lode & placer, 73-2490; *Colorado*, source of placer, 73-3620; *Fiji*, vertical zoning of Au-Ag tellurides, 73-3615; *Ghana*, palaeoplacer, sedimentology, 73-2299; *India*, genesis, 73-1437, 1438; *Nevada*, major & minor elems., 73-3782, fluid inclusion studies, 73-482; *Nevada*, origin, 73-1463; *New Brunswick*, 73-3567; *New South Wales*, geol., mineralization, 73-3612; *Russian SFSR*, boundaries of mineralization, 73-267, types, geol., min., 73-1376; *S. Africa*, origin, 73-3523; *South Dakota*, in mine tailings, 73-3617; *Sudan*, geol., 73-3600; *Switzerland*, in recent alluvial, 73-3532; *Utah*, 73-2511; *W. Australia*, associated wall rock alteration, 73-273; *W. Australia* geol., 73-276; *Yukon*, in stream sediments, 73-2483; *Zaire*, origin, 73-3601

— mineralization, *Tasmania*, associated granitic rock types, 73-3545

Gold Hill, *California v. USA*
 Gold Ridge mine, *Douglas County, Oregon v. USA*

Goldfield, *Nevada v. USA*

Gondwanaland, age determinations, 2220

Gonnardite, *Azerbaijan*, crystal structure, 73-1314

Gonzales County, *Texas v. USA*

Goobarragandra, *N.S.W. v. Australia*

Goodnews Bay, *Alaska v. USA*

Gorceixite, *Guyana*, in placers, 73-754

Gorceixite-goyazite, *New South Wales*, in claystone, 73-1090

Gorev, *Enisei, Russian SFSR v. USSR*

Gorny Altai, *Russian SFSR v. USSR*

Gory Kaczawskie Mts., v. *Poland*

Gothab v. *Greenland*

Gosse Pile, *S. Australia v. Australia*

Gotthard Massif v. *Switzerland*

Göttingen v. *Germany*

Götzenite, crystal structure, 73-1296

Gowganda, *Ontario v. Canada*

Graham Valley, *Nelson v. New Zealand*

Grain abundance, reliability of visual estimates, 73-2244

Grain size measurement, evaluation of two dimensional micro-measurements, 73-2241; in thin section & grain mounts, 73-2242

Gramatikovo v. *Bulgaria*

Gran Canaria, *Canary Is. v. Atlantic Ocean*

Grand Forks, *B.C. v. Canada*

Grangeberg v. *Sweden*

Granites, atlas of textural patterns, 73-3356; chronological aspects, 73-1949; classification, petrol. aspects, 73-4173; determination of Pb by anodic stripping anal., 73-1165; dyke in calcite wall rock, min. paragenesis, 73-822; formation, phys. chem. aspects, 73-4095; Li-, F-bearing magmatic origin, 73-3060; ore-bearing potential, 73-2308; origins, 73-4174; paragenesis of biotite & muscovite in, 73-4014; porphyroblastic, with preserve bedding, 73-2959; SEM study of cracks &

- ranites, (*contd.*)
 pores, 73-2170; *Antarctica*, age, 73-1137, modal, chem. anal., age, 73-3058, orbicular, petrog., 73-912; *British Columbia*, zoning in batholith, origin & significance, 73-915; *British Isles*, regional variation in composition of Caledonian, 73-500; *Brittany*, petrog., 73-862, variations in two-mica type, 73-861; *Congo*, age, 73-2208; *Cornwall*, greisenization in, 73-1662; *Czechoslovakia*, geochem. of gas inclusions in massif, 73-474, Sn-bearing, petrochem., 73-1982, transformation at contact with quartzite, 73-929; *England*, age, 73-2197, model for development, 73-2970, *Shap*, origin, 73-3063, *south-west*, geochem., origin, tectonic setting, 73-2024; *Europe*, regional geochem. variation in Caledonian & Variscan, 73-501; *Finland*, alkali feldspars in rapakivi massif, 73-710; *France*, age, 73-198, 1999; *Germany*, differentiation, 73-1956; *India*, derivation of zircon, 73-649, structure, 73-937; *Ireland*, emplacement & unroofing, 73-1206, petrol., structure, 73-3020, zircon growth & isotopic dating, 73-3981; *Italy*, structural variants of K-feldspar, 73-4023; *Japan*, age, 73-222, O isotopes in Cretaceous rocks, 73-1663; *Maine*, age, 73-1140, zircon variation in significance, 73-2039; *Massachusetts*, microperthite, significance of riebeckite & ferrohastingsite, 73-1821; *New Hampshire*, modal variation in plutonic-volcanic series, 73-916; *Nigeria*, genesis, experimental studies, 73-3678; *Norway*, anatectic, 73-4323, petrog., major elem. relations, 73-854; *Nova Scotia*, ages, 73-2224; *Oklahoma*, resources, 73-1366, 1367; *Portugal*, petrog., modal anal., 73-1985; *Queensland*, age, 73-1131; *Rockall Bank*, age, 73-2194; *Russian SFSR*, course of crystallization and secondary mins., 73-886; *Scotland*, andalusite in margin, 73-858, with zinnwaldite, chem. anal., 73-1829; *Sweden*, age, 73-2189, 2190, geol., 73-3017; *Tasmania*, Sn-bearing, geochem., 73-3766; *Ukrainian Shield*, geochronological subdivision, 73-3287; *W. Australia*, age, 73-2212; *Zaire*, age, 73-3288
- granitic rocks, Au content of mins., 73-3793; base metal distribution in, 73-3773; *Bohemian massif*, flow & fracture fabrics, 73-2029; *California*, & ore deposits, 73-3622; *Canada*, Li distribution, 73-3792; *Egypt*, chem., 73-3797; *Japan*, distribution of Mn & Fe between ilmenite & 73-3759; *Oregon*, phase relations in late-stage felsic suite, 73-1526
- granitoid complexes, *Russian SFSR*, K/Ar ages, 73-1123
- granitic rocks, & gneisses, K/Rb fractionation, 73-1705; estimate of alkalinity, 73-1664; evolution related to major tectonics, 73-4190; *Asia & Pacific Ocean*, K distribution in post-Jurassic, 73-2981; *California*, analytical data, 73-3053; *Canada*, Li distribution in, 73-3792; *Central Asia*, & clays, Nb & Ta content, 73-1665; *Czechoslovakia*, size & pleochroic haloes of zircons, 73-3982; *Montana*, genesis of, below complex, 73-3052; *S. Africa*, zircon studies, 73-4148; *Vermont*, origin of biotite orbicules, 73-2040
- randiorite, *British Columbia*, age, 73-2229; *Czechoslovakia*, basic inclusions in, 73-928; *Ireland*, petrol., 73-1971; *Japan*, age, 73-23; *Maine*, melting relations, 73-3684
- Grants region, New Mexico v. USA*
- Granulites, Be contents, 73-3757; basic, compositional relations among hornblendes & pyroxenes, 73-3185; proposed definition, 73-1051; Proterozoic & Archaean, use of O isotopes in geothermometry, 73-539; Precambrian, K/Rb ratios, 73-3758; sapphirine-quartz assemblage, 73-412; terminology, 73-1053, 1054; *Austria*, age, 73-3285; *Czechoslovakia*, encased in serpentinites, quartz fabrics, 73-2128, multiphase deformation in massif 73-927, petrol., 73-1049; *Ethiopia*, in basement, 73-4112; *India*, petrol., 73-4338; *Norway*, postgranulitic cordierite-calcite-pyrite formation, 73-2108; *Poland*, feldspar development in complex, 73-4022; *Scotland*, age, 73-2195; *Sri-Lanka*, evolution, 73-3186, hornblende-garnet, modal, chem. anal., 73-1047
- Granulite facies, bimetasomatic plagioclase-pyroxene reaction zones in, 73-4316; partial melting & Archaean crust, 73-3157; *Adirondacks*, threefold division, 73-2149; *India*, stability of wollastonite, 73-4340; *Norway*, polyphase metamorphism, 73-1044; *Rockall Bank*, metamorphic rocks, 73-1045; *Sri-Lanka*, subdivision, 73-3186
- — rocks, geochem., origin, 73-3157; nomenclature, 73-1052; *Australia*, corundum assoc. with ilmenite & spinel, 73-2876; *Malagasy Republic*, geochem., 73-2139
- Graphite, crystal structure, 73-2401; formation of deposits, 73-1368, 3540, 3541; growth of whiskers, 73-358; Precambrian formations, loss of volatile components, 73-2701; *Pakistan*, hydrothermal, 73-3539
- Gratonite, *Peru*, in solid gel, 73-2906
- Graubunden v. Switzerland
- Gravels, *Hertfordshire*, pebble, origin, 73-972; *United Kingdom*, production, 73-3628
- Gravity studies, *Norway*, & petrol. significance in alk. complex, 73-2958
- Graz, *Styria v. Austria*
- Great Artesian Basin, *S. Australia v. Australia*
- Great Basin v. USA
- Great Bear Lake, *N.W.T. v. Canada*
- Great Falls, *Montana v. USA*
- Great Lake, *Tasmania v. Australia*
- Great Salt Lake, *Utah v. USA*
- Great Slave Lake, *N.W.T. v. Canada*
- GREECE, Santorini pumice identified on mainland archaeological site, 73-4120; *Allchar*, vrbaita, crystal structure, 73-233; *Euros*, X-ray diffraction study of biotites in volcanic rocks, 73-4010; *Milos*, bentonites, rheological properties, 73-1244; *Mt. Olympus*, *Karya*, brochantite, opt., X-ray, DTA data, 73-1931; *Paros*, garnets in pegmatites, 73-655, lithological map, 73-4109; *Santorini*, calc-alkaline volcanic rocks, petrol., 73-870, Fe sediment formation, 73-2299
- Green Lake, *New York v. USA*
- Greenalite, *Switzerland*, in fissured zone of serpentinite, chem., opt., X-ray, DTA data, 73-1801
- Greenhow, *Yorkshire v. England*
- GREENLAND, continental shelf, geophysical data, 73-4097; Proterozoic mobile belts, 73-3157; *Fiskeneasset*, anorthosite, Xe isotopic composition, 73-512; *Gothåb*, early Precambrian gneisses, geol., age, 73-3157; *Ilmaussaq*, field determination of U & Th by gamma-ray spectrometry, 73-1188, isotope-excited XRF for Nb, Zr & La + Ce, 73-1180; *Imilik*, size-graded layering in gabbro, 73-913; *Ivigut region*, crocidolite as impregnations & veinlets, 73-1822; *Kap Edvard Holm*, Fe-Ti oxides in Upper Layered Series, 73-738; *Kungnat*, syenite complex, experimental studies, 73-2574; *Lilloise*, layered plutonic complex, 73-4130; *Niakornat*, reyerite, crystal structure, 73-3469; *South Qôroq*, alkali clinopyroxenes from nepheline syenites, 73-671
- Greenschist, *Austria*, with pseudomorphs after lawsonite, 73-3173
- facies, experimental assemblages, 73-3685
- — rocks, quantitative determination of carbonates in, 73-2253
- Greenstone, composition, & sea-floor spreading in Archaean, 73-815; submarine, O isotope geochem., 73-2718; *Cornwall*, petrol., chem., 73-3167; *England*, development model, 73-2970, geochem., origin tectonic setting, 73-2024; *Ural Mts.*, classification of volcanic activity, 73-3026; *Virginia*, chem. alteration & spilitization, 73-4318
- Greenstone belts, a model, 73-4113
- Greer Lake, *Manitoba v. Canada*
- Greigite, hydrothermal crystallization, 73-1557; Mössbauer parameters for Fe(II), 73-3483; *Lake Superior*, in sediments, 73-1876
- Greisenization, *Cornwall*, in granite, 73-1662
- Grenada v. West Indies
- Grenville Province, *Canadian Shield v. Canada*
- Greywackes, *Ireland*, sedimentary features, 73-4235; *Scotland*, correlation on chem. data, 73-3870; *Wyoming & S. Africa*, RE elems. in, 73-3835
- Grimsel v. Switzerland
- Grimselite, new mineral, 73-806
- Griphite *S. Dakota*, new data, 73-801
- Griquaite, sulphide mineralization, 73-2956
- Grisons v. Switzerland
- Grosspyrite, and eclogite classification, 73-1036
- Grosskogel, *Tyrol v. Austria*
- Grossular v. garnet
- Grund, *Harz Mts. v. Germany*
- Grunerite v. amphibole
- Gruzinskaya SSR v. USSR
- GUA Papers of Geology, new series, 73-2132
- Guajira Peninsula v. Colombia
- Guano, *India*, resources, 73-3645
- Gudmundite, *Russian SFSR*, 73-766
- Guildford, *Surrey v. England*
- Gujarat v. India
- Gulf of Agaba v. Red Sea
- Gulf of Guinea v. Atlantic Ocean
- Gulf of Lions v. Mediterranean Sea
- Gulf of Mexico, Quaternary cores, organic C isotope ratios, 73-3814; tidal marsh sediment, geochem. & diagenesis, 73-3811
- Gulf of St. Eufemia, *Calabria v. Italy*
- Gulf of St. Lawrence v. Canada
- Gulf of Suez v. Egypt
- Gulngong, *N.S.W. v. Australia*
- Gullbridge, *Newfoundland v. Canada*
- Gulya, *Russian SFSR v. USSR*
- Gümbelie v. mica
- Gunma v. Japan
- Gunnison County, *Colorado v. USA*
- Gutar-Biryusa, *Russian SFSR v. USSR*
- GUYANA, merumite occurrence, 73-754; min. exploration in tropical rain forest, 73-1406; *Cuyuni R.*, hornblende-actinolite, hornblende-cummingtonite associations, 73-1817; *Demerara*, properties of bauxite,

- GUYANA, (contd.)
extraction & application, 73-299; *Hariwa*, lateritic iron ores, 73-2515
- Gypsum, -anhydrite equilibria, 73-3714; Cl Br ratio in fluid inclusions in, 73-522; crystal growth in gels, 73-1573; kinetics of dehydration tested by d.t.a., 73-383; origin of veins by hydraulic fracture 73-776; plasticity of crystals, 73-2159; structure formation, internal stresses, 73-1068; symmetry of SO_4 ion in, 73-2426, 3493; thermochemical behaviour, 73-1572; *Antarctica*, efflorescence, 73-779; *British Columbia*, till-mantled karst, 73-3833; *Egypt*, min., chem., 73-3634; *Jamaica*, origin of deposits, 73-2526; *Japan*, S & O ratios, in kuroko deposit, 73-1645; *Kent*, mining, 73-2081; *Mediterranean Sea*, formation in land-locked lagoons, 73-2909; *Oklahoma*, resources, 73-1366, 1367, 1489; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341; *USSR*, *Kuraminskiy Mts.*, occurrences, 73-1088
- Gyrolite, *Germany*, as metasomatic product, 73-1006; *Utah*, IR anal., 73-4035
- Haast v. *New Zealand*
Habersham County, *Georgia* v. *USA*
Habry, *Bohemia* v. *Czechoslovakia*
Hafnium, quantitative determination, 73-51
Hahns Peak, *Colorado* v. *USA*
Hainault v. *Belgium*
Haiti v. *West Indies*
Haki-machi, *Fukuoka* v. *Japan*
Halaguru, *Mysore* v. *India*
Halfa v. *Sudan Republic*
Halite, cleavage resistance, 73-341; plasticity of crystals, 73-2159; precipitated from sea-water, Br partition coefficients, 73-1708; T & rate dependant deformation, 73-2568; visible & near-IR spectra, 73-1066; *Saskatchewan*, in sylvinitic mining zone, 73-2524
Hall Mr., *Idaho* v. *USA*
Halloysite, kinetics of mullite growth from, 73-429; morphology, 73-1220; stability fields of hydration states, 73-425; *Indiana*, globular cluster microstructure, 73-178; *Mexico*, formation from volcanic rock, 73-204; *Nevada*, hydrothermal deposits, 73-181; *New Zealand*, relation between hydrated & dehydrated states, 73-141
Halotrichite, *Iowa*, in sulphate efflorescences, 73-2913; *Pakistan*, properties, min., 73-4074
Hamakhtesh Hagatan v. *Israel*
Hämeenkylä v. *Finland*
Handigund, *Mysore* v. *India*
Handlová v. *Czechoslovakia*
Hanksite, *California*, crystal structure, 73-2419
Hareidland v. *Norway*
Harford County, *Maryland* v. *USA*
Hariwa v. *Guyana*
Harney Peak, *S. Dakota* v. *USA*
Harohalli, *Mysore* v. *India*
Haroharo, *Taupo* v. *New Zealand*
Harrisonburg, *Virginia* v. *USA*
Harz Mts. v. *Germany*
Hatton v. *Sri-Lanka*
Haut-Ogoué v. *Gabon*
Haute-Loire v. *France*
Haute-Savoie v. *France*
Haute-Alpes v. *France*
Hautes-Pyrénées v. *France*
Häuyne, *Baffin I.*, in lapiz lazuli, 73-1856
HAUTE-VOLTA, age of intrusions in Bir-
rimian orogeny, 73-2202; pedogenesis & formation of montmorillonite, 73-1251
Hawaii v. *USA*
Hazara v. *Pakistan*
Hazaribagh, *Bihar* v. *India*
Heating stage, for single-crystal diffraction studies, 73-1158
Heating stage, simple diffractometer, for oriented clay specimens, 73-3371
Heavy liquids, use of HgBr_2 , 73-2250
Heavy minerals, anal. of moraine, 73-1002; gravity separation, 73-3304; methods for comparing suites, 73-2252; *New South Wales*, regional variation in sediments, 73-996
Heazlewoodite, *Quebec*, in sulphide deposit, 73-1874
Hectorite v. smectites
Hedenbergite v. pyroxene
Hedley, *B.C.* v. *Canada*
Heimaey, *Westmann Is.* v. *Iceland*
Helium, in geochem. exploration, 73-2308
Helvine, *India*, in gondite, 73-725
Hérault v. *France*
Herberton, *Queensland* v. *Australia*
Hematite, effect of magnetic field on reduction, 73-3697; exsolution in ilmenite, 73-741; heating in air & water vapour to form spinel, 73-3696; *Belgium*, in pelitic rocks, X-ray powder data, 73-4327; *Germany*, in lamprophyres, min. data, 73-677; *Michigan*, botryoidal, 73-1102; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341; *Togo*, palaeoplacer deposits, 73-262; *W. Australia*, origin of ores, reserves, 73-3606
Hematophanite, *Sweden*, crystal structure, 73-2450
Hemimorphite, *Arizona*, specimens, 73-3247, 3248; *New Mexico*, specimens, 73-3252; *S. Dakota*, in mine dump, 73-3649
Hercynite, elasticity, 73-2157
Herderite, *Maine*, botryoidal, 73-4367
Hermanov, *Moravia* v. *Czechoslovakia*
Herschel v. *South Africa*
Hertfordshire v. *England*
Hessite, *Fiji*, 73-3615
Heterogenite, *Zaire*, polytypism, 73-2942
Heteromorphite, *USSR*, in semseyite-füllöppite series, 73-775
Heterosite, *Maine*, 73-4367
Heterosite-purpurite, *Ghana*, in pegmatite, 73-1816
Heulandite, composition, opt. props., cell dimensions & thermal stability, 73-1860; crystal structure, 73-1315; polymorphism & crystal chem., 73-1859; *Bohemia*, in Mn deposit, 73-2493; *Montana*, locality, 73-1103; *New Jersey*, 73-4370
Hexahydrite, *Antarctica*, first reported occurrence, 73-779; *Kansas*, 73-1096
Heyite, *Nevada*, new mineral, 73-2943, compared with brackebuschite, 73-2944
Higashimura, *Kyushu* v. *Japan*
High Plains v. *USA*, *New Mexico & Texas*
High-pressure, fusion curves in solids, 73-3659; rock melting experiments, absorption of Fe by Pt capsules, 73-2541; unit for X-ray diffractometer, 73-3315; experimental findings & advances, 73-1501
High Sierra, *California* v. *USA*
High temperatures, location & temperature of hot spot, 73-3661; 0-3 kbar piston-cylinder apparatus for solid state studies, 73-3663
High temperature thermometry, review, 73-3664
High temperature-high pressure, study of solids by polychromatic X-ray diffraction 73-1154
Hindubagh v. *Pakistan*
Höbsö Göl v. *Mongolia*
Hocheifel v. *Germany*
Hodgkinsonite, *New Jersey*, 73-4370
Hodruša v. *Czechoslovakia*
Hodrusite, *Czechoslovakia*, EM anal., 73-2914
Hogback mine, *New Mexico* v. *USA*
Hohe Tauern v. *Austria*
Hokkaido v. *Japan*
Holland v. *Netherlands*
Hollandite-coronadite, *Wyoming*, in fossil bone, 73-1913
Hollandite group mineral, *Wales*, 73-4099
Hollingworthite, *S. Africa*, composition variations, 73-2907
Holly Springs, *Georgia* v. *USA*
Holmquistite v. amphibole
Holstein v. *Germany*
Hope, *B.C.* v. *Canada*
Hornfels, *Czechoslovakia*, contact, min., 73-4311, 4312; *Germany*, ferruginous petrol., 73-4303; *New Zealand*, min. chem. anal., 73-3153; *Queensland*, trondhjemite, 73-3152
Horton in Ribblesdale, *Yorkshire* v. *England*
Hirvas v. *Finland*
Hot springs, *Iceland*, high T alteration min., 73-1005; *India*, O isotope studies, 73-3848; *Japan*, As in water & deposits, 73-549; *New Zealand*, chem., heat output, 73-2726; *Russian SFSR*, formation of sulphides of Hg, Sb, As, 73-1717; *Wyoming*, A & N contents, 73-3854, noble gases in, 73-3855, S isotopes, 73-550
Houston, *B.C.* v. *Canada*
Howeite, *California*, 73-4373
Howlite, *California*, 73-4376
Hrappsey v. *Iceland*
Hualalai, *Hawaii* v. *USA*
Hudson Bay v. *Canada*
Hudson R., *New York* v. *USA*
Hühnerkobelite, *Brazil*, possible, metamorphic, 73-4070
Hull, *Mysore* v. *India*
Hull, *Quebec* v. *Canada*
Humic acids, *Tasmania*, role in podzolic soil, 73-3838
HUNGARY, Pt content of sulphide ore, 73-498; *Algyö*, Pliocene sandstone sedimentology, 73-982; *Börzsöny Mts.*, plagioclase twins in andesites, 73-2857; *Nagybörzsöny*, Fe-distribution in sphalerite grains, 73-761; *Velence Hills*, lamprophyric dykes, chem., spectral analysis, 73-3022
Huntingdon Lake, *California* v. *USA*
Huntite, *S. Australia*, heat capacity at low T & entropies, 73-3667
Hureaultite, *S. Dakota*, atomic arrangements, 73-3501
Huron Claim, *Manitoba* v. *Canada*
Hutchinson, *Ontario* v. *Canada*
Hyaloclastite, *Crimea*, of volcanic group, 73-2052
Hydroboracite, *California*, specimens, 73-3251
Hydrocarbons, aliphatic, in weathered limestone, 73-1726; catalytic formation from fatty acids, 73-1687; genesis in non-marine sediments, 1730; loss from Precambrian graphite-bearing formation, 73-2701; *Alberta*, in gas condensates, 73-1729; *Azerbaijdzhan*, gases, He content, 73-2735; *Queensland*, in shale, 73-1728
Hydrocrussite, *Norway*, unusual environment, first occurrence, 73-1083

- hydrochrysotile, dehydration, 73-3373
hydrofluoric acid solution calorimetry, internal sample container, 73-1175
hydrogen, in Apollo 12 samples, 73-3910
- isotopes, in mins. from porphyry Cu deposits, 73-1649; systematics in weathering profiles, 73-2716
hydrogrossular v. garnet
hydrohalite, X-ray studies, 73-1576
hydromagnesite, DTA, IR studies, 73-2927; in speleothems, biochemical genesis, 73-478; *Iran*, large crystals, 73-2926; *Pakistan*, heat capacity at low *T* & entropies, 73-3668
hydromuscovite v. mica
hydrothermal activity, *Red Sea*, areas of sediment, 73-3524
- alteration, *Bingham, Utah*, of igneous rocks, 73-1462
- deposits, geochem., crystallography of sulphide mins. in IMA-IAOD Joint Symposium, 73-1210; fluid dynamics, 73-2452; *Kazakhstan*, role of groundwater in genesis, 73-2725
- ore-forming solutions, role of S in, 73-1640
- ores, postmagmatic, experimental data on origin, 73-3679; systematics of S & C isotopes, 73-3767
- sinters, age determination, 73-1145
- systems, effect of reduced H₂O fugacity on buffering of O fugacity, 73-2543; effect of salinity on maximum thermal gradient, 73-1497
- veins, genesis & source of min. content, 73-1343
hydroxystite, *Bolivia*, refinement of X-ray data, 73-749
hydroxides, synthetic, Fe-Al substitutions in, 73-1549; thermal effects on B-FeOOH, (Cr_{0.8}Fe_{0.2})(OH)₃, Mössbauer studies, 73-2582
hypersthene v. pyroxene
hypersthene rock series, *Japan*, RE variations, 73-505
- paragi v. Japan*
BERIAN PENINSULA, north-west, remnants of Hercynian thrust plate, 73-4107
ce, morphological stability in aqueous solution, 73-324; morphological stability of cylinders in supercooled melts, 73-1506; superheated, 73-3261
CELAND, lava, major & tr. elem. variation during initial cooling, 73-2048; *RE* in neovolcanic rocks, 73-1672; north, Pleistocene basalts, age, 73-3291; *Domadalshraun*, zoned tephry fieldspars, 73-1841; *Gamla Naefurholt*, bytownite in olivine basalt, opt. chem. data, 73-1848; *Hrappsey* & *Purkey groups*, anorthositic inclusions in Tertiary dolerite, 73-4180; *Kroksfjörður*, central volcano, petrog., 73-954; *Langjökull*, volcanic history & tectonics, 73-4206; *Laugarvatn*, intraglaciated volcanoes, 73-2499; *Reykjanes*, high-*T* alteration minerals and thermal brines, 73-1005; *Vesturhorn*, size-graded igneous layering, 73-3061; *Westmann Is.*, *Heimaey*, present volcanic activity, 73-4205
Iaho v. USA
Iamakkallu, *Andhra Pradesh v. India*
Iocrase, OH-stretching region of IR spectrum, 73-2807; synthesis, phase relations, crystal chemistry, 73-1585; *Malaysia*, antimonian, data, 73-657
igneous complexes, *India*, petrol., geochem., 73-3040
igneous rocks, acid-basic associations, 73-819; basic morphology in granophyre-felsite sheets, 73-819; chem. classification by discriminant & cluster anal., 73-502; conductance at high-*T*, 73-1069; petrology, books, 73-93, 3360; published analyses, 73-1660; *Africa*, Mesozoic activity, 73-831; *Australia*, age, 73-2213; *England*, underlying Caledonian, 73-1976; *Haiti*, petrol., 73-2008, 2010; *India*, basic, behaviour of tr. elems. during differentiation, 73-513; *Norway*, emplacement of plutons, 73-2019; *West Indies*, chem. evolution, 73-2008
Ignimbrites, alkali exchange during devitrification & hydration of glasses in 73-2046; crystal concentration in, 73-952; magnetization, 73-2168; *Italy*, min., chem., 73-4142, Sr in, 73-1675; *Newfoundland*, rheo-ignimbrite, 73-4161; *Utah*, petrog., 73-3096
Ijolite, *Ontario*, nepheline, pyroxene, biotite in, 73-2868
Iki I., *Nagasaki v. Japan*
Ikutsuki-jima, *Kyushu v. Japan*
Ile de Groix, *Morbihan v. France*
Ilford, N.S.W. v. *Australia*
Ilmausaaq v. *Greenland*
Ille-et-Vilaine v. *France*
Illinois v. *USA*
Illite v. mica
Ilmaokite, new mineral, 73-807
Ilmenite, & coexisting Ti-magnetite, Mn fractionation, 73-1653; composition in kimberlites, 73-1908; lunar, EM anal., 73-2770; magnesian, relation of chem. to micro-indentation hardness, 73-1909; *Egypt*, min., 73-4046; *Greenland*, equilibrium with magnetite in Upper Layered Series, 73-738; *India*, exsolution textures, 73-741; *Japan*, distribution of Mn & Fe between granitic magma & 73-3759; *Manioba*, EM anal., 73-2888; *Nevada*, & coexisting magnetite in zoned ash-flow sheets, 73-2883; *Norway*, microtextures, 73-4044, potential ore, 73-3590, solid solution with pyrophanite, EM anal., 73-1906; *Ontario*, *Sudbury*, occurrence, composition, 73-4045; *Russian SFSR*, deposits as beach sand, 73-1428; *S. Australia*, & other Fe-Ti oxides in complex, 73-882; *Taiwan*, from beach sand, chem. anal., 73-1907; *W. Australia*, economic concentrations, 73-992
Ilmenomagnetite, *Norway*, deposits, 73-2492
Ilmenorutile, *Norway*, Sn content, 73-3765
Ilvaite, crystal structure, 73-3456; *Switzerland*, in fissured zone of serpentinite, chem., opt., X-ray, DTA data, 73-1801; *Yugoslavia*, 73-4362
Imilik v. *Greenland*
Imogolite, morphology, 73-1220; surface-charge density dependence on Al₂O₃ content, 73-142; tubular structure, 73-3468; *Hawaii*, in saprolite of basalt, 73-3412
INDIA, Barakar coals, phys. constitution, 73-2090; Deccan traps, chem., 73-517, differentiation & pyroxene relations in, 73-3794, tr. elems., 73-3794; min. resources in recent deposits, 73-3645; Gangpur series, metamorphism, 73-2142; magnetites, DTA studies, 73-787; nature & origin of Blue Dust in Precambrian sedimentary Fe ores, 73-272; U prospecting, 73-1379; east, non-marine sediments as source for hydrocarbons, 73-1730; *Himalayas*, derivation of zircon in granitic rocks, 73-649; *peninsular*, radioactivity in mins., 73-650, gneiss complex, petrog., 73-4341; *Rajputana, Bar*, deformation of conglomerate, 73-938; *Singrauli coalfield*, coal, burnt coal & para lava, petrol., 73-1011; south, deep main faults, 73-941, shell structure of *Inoceramus* from Upper Cretaceous, 73-785, tectonic setting of upper mantle in Precambrian rocks, 73-836, ultramafic & related rocks, 73-835
—, ANDHRA PRADESH, zoning of ore deposits in Precambrian, 73-273; *Amaravathi*, myrmekites from charnockites, 73-2860, ortho- & clinopyroxenes from charnockite series, 73-2824; *Bhandara*, dumortierite, structure, 73-1297; *Chelima*, kimberlitic dykes, min., tr. elem. anal., 73-895; *Chitral*, hornblende porphyryite, petrochem., 73-896; *Cuddapah Belt*, asbestos deposits, origin, 73-1483, 1484, tr. elem. behaviour in basic igneous rock differentiation, 73-513; *Devada*, Mn powder, sedimentol., 73-1432; *Eastern Ghats*, alkaline rocks, petrol., 63-4151, facies transition & growth of hypersthene in high-grade metamorphic rocks, 73-1046, granitization & evolution of charnockite series, 73-1055, myrmekite from charnockitic rocks, 73-1048; *Gari-vidi*, skarn in calc granulite, 73-1018, & *Garbham*, stability of wollastonite in granulite facies, 73-4340; *Idamakallu-Racherla*, alkali-amphiboles in syenites, 73-1819; *Khammam district*, nepheline syenite belt, 73-4156, *Kunavaram*, carbonates in nepheline syenite band, 73-891; *Kundulur*, alkali syenites, 73-3039; *Medak*, quart-magnetite rocks, structure, petrog., 73-940; *Nellore*, formation temperatures of pegmatites, 73-1482; *Ongole*, carbonates, petrog., 73-892, nepheline syenite, alkaline rocks, 73-893; *Ramagiri*, Au genesis, 73-1437, 1438; *Vemparala*, magnetite ores, min., chem., 73-4043; metamorphic rocks, petrog., 73-4339, tr. elems. in mins. & rocks of Precambrian, 73-1627
—, ASSAM, trace metals in crude oil, 73-559
—, BIHAR, relationship of chem. & min. in Rajmahal basalts, 73-897; *Hazaribagh*, cleavelandite-beryl bodies in pegmatite, 73-663; *Raighir*, O isotopes in hot springs, 73-3848; *Richughuata*, petrochem. of peridotite dykes & upper mantle composition, 73-834; *Shabad*, Amjhore pyrite deposit, S isotope study, 73-494; *Singbhum*, Cu deposits, tr. elem. geochem., genesis, 73-3543, geochem. trends during migmatization, 73-490, granitic complex, petrogenetic & structural evolution, 73-936, radioactive limonite, 73-2504, sulphide mineralization, 73-1439, sulphide ore minerals, structures, 73-1875, S isotopes in Cu deposit, 73-3770, ultramafic intrusion, petrol., geochem., 73-1991
—, GUJARAT, *Chota Udaipur, Amba Dongar*, fenitization of basalts & dolerites, 73-4315; *Phenai Mata region*, dyke cluster, petrog., 73-4152, tholeiitic igneous complex, 73-4195; *Dedan*, picroderlites, petrol., 73-3070; *Khandia*, Pb-Zn mineralization, age, 73-1435, 1436; *Mount Girnar*, amphibole paragenesis, 73-4006, lavas, petrog., 73-4153, petrol., geochem. of complex, 73-3040; *Tharad-Serau area*, Deccan basalt occurrence, 73-894
—, KERALA, *Alleppey*, natural 17 Å montmorillonite-organic complex, 73-3392
—, MADHYA PRADESH, *Bastar District*, blue dust Fe ore, nature & origin, 73-3542; *Chhindwara*, granitic rock, heavy

INDIA, MADHYA, (contd.)

- mins. in, 73-4257; *Kajlidongri*, bixbyite in Mn ores, 73-4047; helvine in gondite, 73-725. Mn oxide, min., genesis, 73-2478; *Vindhyan range*, O & C isotopes in limestone, 73-528
- , MAHARASHTRA, dykes of Deccan traps, 73-4155; *Bombay*, magnetic grains in columnar basalts, 73-1076; *Lonar Lake*, impact crater in basalt, 73-3976; *Vajreshwari*, O isotopes in hot springs, 73-3848
- , MANDI, evolution of myrmekites, 73-715; rapakivi structure in migmatites, 73-1059
- , MYSORE, age of Precambrian, 73-19; Dharwar stratigraphy, 73-986; emplacement of chromite bearing ultramafic rocks, 73-935; K Rb, Ba Rb ratios & Li geochem. of coexisting rock types, 73-504; palaeomagnetic & geochem. correlation of basic dykes, 73-1080; *Arsikere granite*, structure, 73-937; *Bababudan Hills*, quartzites, isogon patterns for minor folds, 73-939; *Badami*, authigenic feldspars in arkosic sandstones, 73-4258; *Chamundi granite*, biotite from basic schlieren, 73-4011; *Chickmagalur*, Fe deposit, geol., 73-2503; *Chitaldrug*, Dharwar metavolcanics, geochem., 73-2690; *Handigund*, native Cu in Deccan traps, 73-2875; *Harohalli*, differentiated hypers-thene-olivine dolerite dyke, 73-3041; *Huli*, high calcic pigeonite in pegmatitic segregation of dolerite dyke, 73-670; *Ingaldhal*, sphalerite, geochem., 73-4057; *Lokapur*, albitized slates, chem. anal., 73-3151; *Satur-Halaguru*, orthopyroxene-bearing rocks in high-grade metapelites, 73-1035; *Srirangapatam*, interpenetration twins in plagioclase in basic dyke, 73-4026
- , ORISSA, extraction of Ni from laterites, 73-1433; primary structures in chromitites, 73-3604; *Baramba*, granulites, petrol., 73-4338; *Cuttack*, cavity-filling kyanite, 73-658; *Kalangi*, bedded chromite deposits, 73-3605; *Koraput*, alkaline complex, structure 73-4154; *Sukinda*, olivines from ultramafites, 73-3978, chromites in dunite, 73-743
- , PUNJAB, *Dharmasala*, Darang trap & inclusions, 73-898, pseudotachylites, in Central gneisses, 73-1060; *Dhauladar Range*, agmatites in Central gneisses, 73-2141, hydrothermal development of fibrolite, 73-1027, metamorphism & migmatization, 73-1061, stability of zircons in Central gneisses, 73-648, xenoliths & migmatitic products from Central gneisses, 73-1062
- , RAJASTHAN, norites in Banded Gneissic complex, 73-933; possible impact structure, 73-1778; *Ajmer*, *Bandanwara*, granulitic rocks in Banded Gneissic complex, 73-934; *Rajagarh*, chlorapatite, data, 73-791; *Alwar*, *Dariba Cu mine*, sulphide min., 73-1434; *Bhinai region*, mafic & ultramafic rocks, petrog., modal anal., 73-1040; *Jaipur*, *Shahpura*, dumortierite in quartzites, 73-3993; *Khetri*, *Kolihan*, Cu-Fe sulphide phase, data, 73-1878; *Mundwara complex*, carbonate veins, min., chem., 73-4314; *Umra*, geochem. of V, 73-479; *Zawar*, Pb-Zn belt, native S, 73-4366
- , TAMIL NADU, metamorphic episodes, 73-3289; *Alappanur*, plumasite, origin, 73-2143
- , UTTAR PRADESH, *Dangoli*, migmatites, petrog., 73-4337; *Garhwal*, overthrusting & emplacement of basic rocks, 73-2980; *Sonrai*, Cu mineralization, 73-2502
- , WEST BENGAL, *Gaurangdi*, exsolution textures in ilmenite & magnetite, 73-741; *Raspol*, growth stages in staurolite related to deformation, 73-942
- INDIAN OCEAN, aeolian dust-loadings, min., 73-4263; *Amirante Is.*, *Remire*, diagenesis of phosphatic carbonate rocks, 73-4264; *Comores Archipelago*, evolution of basaltic & differentiated lavas, 73-3089, petrol. of lavas, 73-885; *Kerguelen*, spinel-gabbro xenoliths & stability of plagioclase at high-T, 73-4193; *Réunion*, genetic relations of volcanic rocks, 73-2056, thenardite in fumaroles, chem., DTA, IR, X-ray diff. data, 73-2910. *Piton de la Fournaise*, 1972 volcanic activity, 73-3090; *Somalia Coast*, Sr distribution in Recent sediments, 73-3830
- Indiana v. USA
- Indium, AAS determination, 73-2308
- compounds, in NbO₄, in TaO₄, lattice constants, 73-2409
- Infrared spectra, of hydroxyl ions in apatites, 73-1337
- spectroscopy, interferometric, for min. identification, 73-83
- studies of crystal defects, book, 73-2310
- Ingaldhal, Mysore v. India
- Inspiration mine, Arizona v. USA
- International Mineralogical Association Meeting, 1970, papers & proceedings, 73-1209; Joint Symposium with IAGOD, 73-1210
- Inverell, N.S.W. v. Australia
- Inverness-shire v. Scotland
- Inyo County, California v. USA
- Iodine, photometric micro-determination in silicate rocks, 73-60
- Ionic conduction in solids, 73-3446
- Iowa v. USA
- IRAN, magmatic & orogenic evolution of central volcanic belt, 73-890; wulfenite, meta-zeunerite, lavendulanite, orpiment specimens in Sorbonne collection, 73-3266; *Anarak*, *Kali-Kafi ore deposit*, new mineral, (Cu,Zn)₂(OH)₂Cl, possibly named anarakite, 73-1934, *Tschah Khuni mine*, khuniite, new min., 73-1939, murdochite, chem. of zoning, 73-748; *Baluchistan*, *Mt. Taftan*, geol., 73-4213; *Dasht-e Kavir*, celestine deposit, 73-3635; *Kerman-shah*, engineering soil, 73-1266; *Kuchir*, labradorite, optical orientation, 73-1147; *Soghan*, hydromagnesite, large crystals, 73-2926
- IRAQ, vertical migration of oil, 73-1727; *Tigris & Euphrates R.*, recent sediments & older detrital deposits, min., 73-4256; *Wadi Husainiya*, Fe ores, composition & sedimentary structure, 73-1424
- Irrasite, S. Africa, compositional variation, 73-2907
- IRELAND, Dalradian sedimentation, folding & metamorphism, age, 73-1116; *Leinster*, Lower Palaeozoic volcanics, 73-4138; *Leinster granite*, aureole, curious garnet clusters, 73-653, growth trends of zircons, 73-2801, unusual zircons, 73-3980; *north-east*, Tertiary acid magmatism, 73-4183; *south-east*, zircon growth from minor acid intrusions, 73-3981
- , ANTRIM, *Ballylig*, bauxite for road surfacing, 73-298; *Rathlin I.*, Maddygalla dyke, petrol., 73-1970; *Tieveragh*, osumilite in buchite at contact of dolerite plug, 73-3996
- , ARMAGH, *Slieve Gullion*, uplift following cone-sheet intrusion, 73-820
- , CAVAN, tidal flat evaporitic facies, 73-4234
- , DONEGAL, granite emplacement & uproofing, 73-1206
- , DUBLIN, *Rockabill granite*, petrol. structure, 73-3020
- , GALWAY, *Connemara*, garnet porphyry, blasts with spherically arranged inclusion, 73-2968, *Dawros*, spinels in peridotite, 73-742
- , LEITRIM, tidal flat evaporitic facies, 73-4234
- , LONGFORD, *Keel*, Hg as guide to sulphid mineralization, 73-2308
- , LOUTH, *Carlingford Complex*, geochem. of plagioclases, 73-713
- , MAYO, *Mullet Peninsula*, pre-Caledonian rocks, 73-2113
- , TIPPERARY, *Silvermines*, Pb & S isotopes in base metal mines, 73-1629
- , WICKLOW, *Arklow Head*, Ordovician volcanics, petrol., chem., 73-4135; *Aughrim-Ballinaclash*, minor acid intrusions, petrol., 73-1971; *Bray Head*, quartzites & greywackes, sedimentary features, 73-4235
- Irtemite, new mineral, 73-1937
- Iridium, association with Al in L chondrites, 73-3969
- Irish Sea, refraction seismic surveys, 73-195
- Iron, Al substitutions in synthetic oxides & hydroxides, 73-1549; AAS analytical scheme, 73-48; behaviour in presence of transition elements, 73-373, 374; determination by compleximetric titration, 73-54; determination of ferrous and ferric ions in silicate mins., 73-56; ferrous, determination, use of automatic titrator, 73-2270; geochem. cycle & microorganisms, 73-476; in silicate rock anal. method comparison, 73-3325; non-destructive NAA, 73-73; rapid extraction & determination of Fe(II) in silicate rocks & mins., 73-2268; & rapid spectrophotometric determination in rocks, mins. & Ti ores, 73-1162; submarine encrustation, min., 73-4379; X-ray spectrographic anal. in silicate rocks, 73-66; *Lake Superior*, enriched layers in Holocene sediments, 73-3822; *Wales*, resources, 73-1371
- deposits, evaluation, 73-3514; *Appalachians*, 73-1394; *Brazil*, geol., 73-1407; *geol.*, 73-1470; *British Columbia*, age, 73-28; *Ecuador*, volcanic stratabound, 73-3623; *Egypt*, ochre, geochem., 73-3786; *France*, limonite, geol., 73-3592; origin, 73-2494; *Germany*, source of Fe, 73-3530; *India*, geol., 73-2503; *Liberia*, formation & supergene ores, 73-1373; *New Mexico*, genesis of Precambrian banded, 73-1467, 1468, geochem. background values, 73-3776; *Pacific Basin*, genesis, 73-3582; *Sardinia*, kars concentration, 73-3533; *Tennessee*, 73-1461; *Turkey*, geol., 73-2469; *Utah*, 73-2486; *Wyoming*, geochem., 73-3787
- formations, oolites & pisolites, 73-2463; Precambrian cherty, phys. sedimentation, 73-2299; terminology, 73-2462; *Hudson Bay*, banded Precambrian, evolution, 73-2232
- minerals & compounds, amorphous oxide precipitates in deep sea sediments, 73-2987; β -Fe₂O₃, new structural form of iron(III) oxide, 73-3477; Fe₂TeO₄, crystal structure, 73-1336; Fe-Ti oxides effect of Mg on, 73-1534; formation of sedimentary, 73-1359, 1360; hydrated ferric oxides, crystallinity, 73-3700; hyd

- ron, minerals & compounds, (*contd.*)
 rous oxides, adsorption & coprecipitation of Ag on, 73-486; $MgCr_2O_4$ - $MgFe_2O_4$ series, equilibrium studies, 73-365; origin of $K\beta'$ satellite peak in XRF spectra, 73-1281; synthesis of Fe-Ti oxides under hydrothermal conditions, 73-370; *Cyprus*, fibrous sulphides, 73-759; *W. Australia*, silicate paragenesis, 73-681
 ores, marine sedimentary, source of metals, 73-491; *Egypt*, geol., petrog., geochem., min., 73-261; *Finland*, manganeseiferous, associated with volcanic complex, 73-856; *India*, blue dust, nature, origin, 73-272, 3542; *Iraq*, composition, sedimentary structures, 73-1424; *Norway*, pisolith, chem., 73-1656; *Pakistan*, effect of heating, 73-3687; *Wyoming*, Precambrian, geochem., origin, 73-3787; *Yugoslavia*, sedimentary with Ni & Cr, chem., min., 73-258
 sediments, *Greece*, precipitation from submarine springs, 73-2299
 sedimentation, *Lake Tchad*, 73-2299
 onestone, *New South Wales*, geochem., 73-1654; *Norway*, Jurassic erratics, 73-970
 on Hill, *Colorado* v. *USA*
 onwood, *Michigan* v. *USA*
 shpping, *Marquette County, Michigan* v. *USA*
 sla Desecho v. *Puerto Rico*
 sle of Man v. *British Isles*
 son Creek, *Kentucky* v. *USA*
 isotopes, stable, geochem., 73-3361
 ISRAEL, building stones, book, 73-3365; origin of high-T min. assemblage of "Mottled Zone", 73-985; *Galilee*, Judea group, lithostratigraphy, deposition, 73-3123; *Hamakhtesh Haqatan*, dolomitization in Jurassic rocks, 73-4255; *Jordan Valley*, noble gases in groundwaters, palaeotemperatures, 73-2738; *Makhtesh Ramon*, zoned dolomite crystals, 73-1917; *Negev*, interstratified illite-smectite, 73-190; Palaeocene-early Eocene environments of deposition, 73-2344
 acolumite, *N. Carolina*, flexible sandstone, 73-2097
 ITALY, Lower Permian rocks, 73-978; north-west, bedded charts, 73-2084; *Alpi Marittime*, *Argentera*, K-feldspar, structural variants in granite, 73-4023, *M. Pelago*, anatexites, geol. petrog. 73-3174; *Alps*, sphalerite & galena in ore deposits, 73-1879; *Alto Adige*, Palaeozoic volcanics, geochem., 73-3801; *Apennines*, *Montemerano*, Liassic volcanism in crinoidal limestones, 73-1983; *Bolzano*, U & heavy metals in Permian sandstones, 73-2299; *Calabria*, phengite & muscovite in phyllites, 73-4015, zircon & monazite in sediments, provenance, 73-4108, *Fuscaldo*, lawsonite-albite facies metamorphism, 73-2131, *Gulf of St. Eufemia*, off shore & beach sedimentation, min., 73-4251; *Campania*, pyroclastics, stratigraphy, 73-4207; *Cascata Toce*, Bündnerschiefer series, geol., 73-1013; *Cottian Alps*, *Momiso Massif*, pyroxenes in ophiolitic metamorphism, 73-1815; *Dolomites*, distribution of analcite & correlation with albite in "pietra verde", 73-727; *Elba*, $2M_2$ lepidolite, crystal structure, 73-3465, serpentinites, andesites, geochem., 73-1984, spessartine specimen in Sorbonne collection, 73-3266; *Filicudi I.*, latite-andesite magma, 73-4189; *Liguria*, structural features of ophiolites, 73-4188; *Luciana*, *Monte Vulture*, ignimbrites, min., chem., 73-4142; *M. Prene-*
tini, Miocene sedimentology, geochem. K/Ar age, 73-4250; *Novara*, *Mt. Zeda*, "cenerigneis", petrochem., 73-4332, *Petit Monde*, sulphide deposit, min., 73-2495, *Valle Strona*, metabasic rocks, petrol., 73-4334; *Parma*, *Pedrignano* zoned almandine, 73-2806; *Reggio Calabria*, *San Giorgio Morgeto*, andalusite in pegmatitic rock, opt., chem., X-ray data, 73-3990; *Rieti*, *Cupaello*, kalsilite-melilitites, chem., 73-4141; *Roccamonfina*, K-rich lavas, petrogenesis, 73-2050; *Sondrio*, *Val Malenco*, mineral collecting, 73-1085, titan-clinohumite, crystal structure, 73-2362, *Val Masino*, albite-Carlsbad twin of andesine, 73-4024, *Valle Bodengo*, O isotopes in Lepontine gneiss mins., 73-540; *Tolfa*, alunite deposits, S isotopic evidence for supergene origin, 73-496; *Traversella*, mining history, min., 73-3240; *Tuscany*, hydrogeochem. survey, 73-2308, Sr in ignimbrites, 73-1675; *Valesia to Val d'Ayas*, nappes, petrog., tectonics, 73-3175; *Val d'Ossola*, sphene & axinite, 73-4309; *Val d'Ossola-Val Strona*, peridotite, 73-2126; *Val Mastallone*, metamorphic complex, petrog., 73-3176; *Vesuvius*, age of carbonized branch in ash bed, 73-2200; *Vulcano I.*, crystallization of fumarolic sulphides, 73-2299, tr. elems. in marine sediments, 73-2299
 —, *SARDINIA*, karst development & mineralization, 73-3533; ore deposition in karst formations, 73-2299; *Calabona*, djurleite, EM anal., DTA, X-ray data, 73-2905; *Sarrabus-Gerrei region*, strata-bound syngenetic Pb-Zn deposits, 73-3534; *Uri*, bentonite deposit, min., chem., 1243; *Villanova Montealeone*, stellerite, data, 73-4034
 —, *SICILY*, *Catania*, recent submarine pillow lavas, 73-3084; *Mt. Etna*, alkali basalts, petrochem., 73-4209, fumarole temperature increases on summit cone, 73-4208, sulphuric acid emission, 73-3085, tectonic movements of lower slopes, 73-2051, 1971 eruption, structure, petrog., rheology, gases, palaeomagnetism, 73-3084, 3085; *M. Peloritani*, metamorphic series, 73-4333
Itinga, *Minas Gerais* v. *Brazil*
Ivigtut v. *Greenland*
 IVORY COAST, new data on tektites, 73-1770; *Daloa*, calcite-cemented sandstone created by tree sap, 73-4260; *Tortiya*, repeated twin in natural diamond, 73-2874
Iwate v. *Japan*
Izu-Hakone v. *Japan*
Jachymov v. *Czechoslovakia*
Jackson County, *N. Carolina* v. *USA*
Jacoba mine v. *Brazil*
 Jacobsite, absorption and atomic number corrections in EM analysis, 73-65; *Kasakhstan*, Zn-bearing, 73-2881
Jacupirangite, *Norway*, potential ore, 73-3590
 Jade, imitation, 73-2642
 Jadeite v. pyroxene
 Jaén v. *Spain*
Jaipur, *Rajasthan* v. *India*
James R., *Virginia* v. *USA*
Jamesonite, *California*, 73-4372
Jamrud, *Khyber Agency* v. *Pakistan*
Jan Mayen v. *Atlantic Ocean*
Jandul Valley, *Dir* v. *Pakistan*
 JAPAN, B contents in kaolin clays, 73-144; distribution of Mn in limestones, 73-530; facies of some Ca-Fe-Si skarns, 73-1019; "kuroko" deposits, S & O isotope ratios of baryte, anhydrite, gypsum, 73-1645; O isotopes in granitic rocks, 73-1663; Palaeozoic geosynclinal basalts, RE in, 73-510; volcanic rocks, O isotopes variations in magmatic differentiation processes, 73-3803; north east, spililitic basalts, authigenic mins., 73-1992; *Abukuma plateau*, gabbroic rocks in Tabito plutonic complex, petrochem., 73-900; *Akita Prefecture*, *Furotoke mine*, bethehtinite, min., 73-1877, *Kosaka mine* kuroko mineralization, 73-1440, *Shakanai mine*, hydromuscovite, 73-177; *Akita-komaga-take*, volcanic eruption observed by IR radiation meter, 73-963; *Amami-oshima*, age of granites, 73-22; *Amori Prefecture*, *Osoreyama Hot Springs*, As in waters & deposits, 73-549; *Fukuoka*, *Haki-Machi*, age of granodiorite, 73-23, *Moji*, *Hata*, Mn-poor axinite, 73-668, *Nagatare*, pollucite, chem., opt. data, 73-732, *Wakamiya-cho*, deweylite and serpentine, min. studies, 73-697; *Fusamata*, abukumalite, chem., opt. data, 73-733, *Karasugwa*, bastnäsite from altered allanite, chem. anal., 73-790 *Suishoyama*, yttriofluorite, chem. anal., 73-804; *Gunma Prefecture*, *Oze*, illite-montmorillonite, crystal structure, 73-1306; *Gifu Prefecture*, *Akasaka limestone*, state of Mn in, 73-529; *Hokkaido*, *Nemuro*, age of alkaline rocks, 73-21; *Ibaragi Prefecture*, *Yamakata*, interstratified chlorite-montmorillonite from green tuff, 73-191; *Iwate Prefecture*, *Matsuo mine*, livingstonite, EM, X-ray, opt. data, 73-1885; *Izu-Hakone*, RE in apyric rocks, 73-505; *Kyushu*, *Higashimatsuura* & *Ikutsuki-jima*, basaltic rocks, petrochem., 73-901; *Kyushu University*, *Kō* collection of minerals, 73-1089; *Minami-osumi*, age of granite, 73-22; *Miyagi Onikobe basin*, vivianite in mudstone, 73-799; *Miyazaki Prefecture*, *Mitate mine*, Ōbuki marble, chem. anal., lattice constants of calcite, 73-783; *Nagano Prefecture*, *Kinbu mine*, ferrohastingsite, data, 73-679, *Ryūjima mine*, mineralization, 73-1441, *Shinyo mine*, diocathedral chlorite, 73-1831; *Nagasaki*, *Iki I.*, kaersutite, crystal structure, 73-225; *Niigata Prefecture*, *Omi-Kotaki area*, jadeites, min., paragenesis, 73-1814; *Oki-Dogo I.*, alkaline volcanics, RE distribution, 73-3802; *Ōsumi Peninsula*, distribution of Mn & Fe between ilmenite & granitic magma, 73-3759; *Ryōke region*, *Takato district*, chem. reaction between amphibolite & gneiss, 73-1039; *Saga Prefecture*, *Yamashirocho*, Fe-rich saponite in druse cavities of basalt, 73-702; *Sapporo*, *Chitose mine*, quartz fabrics in epithermal ore vein, 73-3069; *Tokyo*, *Miyahira*, strontianite chabazite, 73-729; *Tsushima I.*, *Shigekuma*, argentic tetra-hedrite, 73-768
 Jarosite, alkali-hydronium, synthetic, thermal investigations, 73-2603; *Poland*, in Pliocene clays, 73-4075
Jarrahdale, *W. Australia* v. *Australia*
Jasper, *Alabama*, black, "basanite", 73-3250; *British Columbia* & *Washington*, petrol., 73-4270; *Michigan*, 73-1102
Jasperoid, *USA*, characteristics, origin, economic significance, 73-4274
Jebel Al Wask v. *Saudi Arabia*
Jebel Marra, *Darfur* v. *Sudan Republic*
Jefferson City, *Tennessee* v. *USA*

- Jeremejevitze v. eremeevite
Jerome, Arizona v. USA
Jhelum v. Pakistan
Joan Lake, Labrador v. Canada
 Joaquinite, crystal structure, 73-1291;
California, chem., phys., opt., structural
 properties, 73-659
 JORDAN, phosphate-bearing strata, factors
 controlling deposition, 73-1698
 Jordanite, *Tunisia*, in stalactites, 73-260
Jordan Valley, micromins. in sedimentary
 rocks, 73-2343; also *v. Israel*
 Jordisite, -zirkelite min. paragenesis, 73-
 1365
 Josëite A, *USSR*, data, 73-774
 Josëite A & B, *Russian SFSR*, associated
 with tetradymite, 73-773
 Josëite C, *Russian SFSR*, EM anal., X-ray,
 reflectivity, VHN data, 73-1890
 JUPITER, D/H ratio in atmosphere, 73-3258
Jutland v. Denmark
- Kaersutite v. amphibole
Kafan, Armenian SSR v. USSR
 Kainite, *Germany*, crystal structure, 73-1327
Kaipara v. New Zealand
Kaipokok Bay, Labrador v. Canada
Kajlidongri, Madhya Pradesh v. India
Kakagi Lake, Ontario v. Canada
Kakanui v. New Zealand
Kalgoorlie, W. Australia v. Australia
Kali-Kafi, Anarak v. Iran
Kalrangi, Orissa v. India
 Kalsilite, nepheline-, exsolution study,
 73-439; structure type on $\text{CaAl}_2\text{O}_4\text{-SiO}_2$
 join, 72-442
Kamativi v. Rhodesia
Kamchatka, Russian SFSR v. USSR
Kaminak Lake, N.W.T. v. Canada
Kamoto, Katanga v. Zaire
Kane, Wyoming v. USA
 Kanemite, new mineral, 73-1938
Kansas v. USA
 Kaolin, consolidated, directional properties,
 73-1262; *Czechoslovakia*, new deposit,
 min. and technological props, 73-182;
Japan, B content, 73-144; *Poland*, min.,
 petrog., 73-3401; *Portugal*, clay min.
 of deposit, 73-2325; *Vermont*, geol.,
 origin, 73-1254
 Kaolinite, acid-base reactions & the
 properties of, in non-aqueous media, 73-
 138; adsorption of amines, 73-170;
 -amide complexes, IR spectra of inter-
 lamellar, 73-172; clay, swelling behaviour
 in presence of electrolytes & polyelectro-
 lytes, 73-3388; clinocllore bodies, SEM,
 73-2620; conversion to sillimanite and/or
 mullite, 73-403; detection of siderite in
 mixture by DTA, 73-789; diagenetic
 development, 73-198; effects of grinding
 with KBr, 73-3377; ESR in, 73-1216;
 fabric of floccules, 73-151; formation
 during alteration of silicates by H_2O
 at 200°C, 73-135; formation from boeh-
 mite & silica, 73-426; formation of meta-
 stable quartz-type structures from, 73-
 1612; investigation of shear-induced
 structures, 73-155; kinetics of mullite
 growth from, 73-429; precipitation at
 25°C, 73-134; prototropy during per-
 curssive grinding, 73-149; -pyrophyllite
 equilibrium, 73-2617; reaction with Fe,
 Co & Ni oxides at high *T*, 73-2618;
 reorganization by dehydroxylation, 73-
 1305; sodium, catalytic activity of, 73-120;
 stability in pelitic rocks, 73-4229; surface
 charge characterization, 73-167; synthesis
 at room temperature, 73-133; thermal
 decomposition, 73-3742; Ti as free oxide
 & substituted forms in, 73-145; *Atlantic*
Ocean, in aeolian dusts, 73-2088; *New*
Jersey, specimens, 73-4370; *Nigeria*,
 primary in greisen, 73-1420; *Pakistan*,
 min., 73-3403; *Poland*, composition,
 73-3401; *Poland*, underlying dolerite,
 73-1245; *Portugal*, in altered veins in
 porphyry, DTA, chem., 73-2326; *Utah*,
 deposits, 73-2509; *Wyoming*, origin of
 large crystals, 73-3400
 — minerals, intercalation abilities, 73-3372
 Kaolinization, *Mexico*, hydrothermal, 73-
 197
Kap Edvard Holm v. Greenland
Kara-Kamar, Tadzhik SSR v. USSR
Karasugwa, Fukushima v. Japan
Karawanken Mts., v. Austria
Karelia, Russian SFSR v. USSR
Karikari v. New Zealand
Karkonosze v. Poland
Karlovy Vary v. Czechoslovakia
Karonge v. Burundi
 Karst development, *Sardinia*, & mineraliza-
 tion, 73-3533
Karuli, Jhelum v. Pakistan
Karviná v. Czechoslovakia
Karya, Mt. Olympus v. Greece
Kasai v. Zaire
Kassala v. Sudan Republic
Katanga v. Zaire
 Katagite, EM & diffraction identification,
 73-1823
Kavalerovo, Russian SFSR v. USSR
Kazakhstan v. USSR
Keel, Longford v. Ireland
Keeweenaw, Michigan v. USA
Kelly mine, New Mexico v. USA
Kelso, Washington v. USA
Keno Hill, Yukon v. Canada
Kent v. England
Kent massif v. USSR
Kentucky v. USA
 KENYA, Rift volcanics, K/Ar ages, corre-
 lation of rift structure with *Red Sea*
 trough, 73-1122; south, ages of rift
 volcanics, rift faulting, 73-2204; *South*
Turkana, primary analcite & calcite
 in phonolite, 73-3032
Kerala v. India
 Keratophyres, *Brittany*, new anal., 73-863
 Keratophyre, -spilite terrains, petrol. inves-
 tigation difficulties, 73-4120
Kerguelen v. Indian Ocean
Kermadec Is. v. Pacific Ocean
Kermanshah v. Iran
 Kermesite, determination of opt. props.,
 73-2908; *California*, 73-4372
 Kernite, crystal structure, 73-2416; visible &
 near-IR spectra, 73-1066; *Argentina*,
 chem., phys., opt., X-ray powder diffrac-
 tion data, 73-4077
 Kesterite, stannite-, exsolution, *British*
Columbia, 73-2897
Khaidarkan, Kirghizian SSR v. USSR
Khammam, Andhra Pradesh v. India
Khandia, Gujarat v. India
Kharga Oasis v. Egypt
Khetri, Rajasthan v. India
Khewra v. Pakistan
Khibiny, Russian SFSR v. USSR
Khoutrad, Kazakhstan v. USSR
Khovuaksinsk, Russian SFSR v. USSR
 Khuniite, new mineral, 73-1939
Khyber Agency v. Pakistan
Kibo v. Tanzania
Kilauea, Hawaii v. USA
Kilembe v. Uganda
Kilimanjaro v. Tanzania
Kimberley v. South Africa
Kimberley, W. Australia v. Australia
 Kimberlite, & related rocks, reappraisal,
 73-2014; composition of ilmenites in,
 73-1908; olivine composition, silica ac-
 tivity, O fugacity in, 73-4175; O isotope
 ratios in eclogites from, 73-519; petro-
 of xenoliths in pipes, 73-814; *Australia*
 evidence for occurrence, 73-4158; *Kansas*
 petrol., 73-850, xenoliths in, 73-204;
North West Territories, petrol., 73-307;
Russian SFSR, chrome-rich garnets
 parageneses, 73-3983, silicified pipe, geo-
 73-3148; *Siberia*, bitumens in, 73-52;
Siberian platform, radioactivity, 73-268;
S. Africa, magmatic sedimentation
 carbonatitic differentiation, 73-199;
S. Australia, 73-3045
Kinbu, Nagano v. Japan
King I., Tasmania v. Australia
Kings Mt., N. Carolina v. USA
Kinston Range, California v. USA
Kipawa Lake, Quebec v. Canada
Kirghizian SSR v. USSR
Kirkcudbright v. Scotland
 Kirschsteinite, *USSR*, magnesian, first find
 data, 73-2800
Kisbanya v. Romania
Klamath Mts., California v. USA
Kleberg Point, Texas v. USA
Kleinarlal, Ostalpen v. Austria
Klickha, Transbaikial, Russian SFSR
USSR
Klodzio v. Poland
 Knebelite v. olivine
 Kobellite, *USSR*, first find, 73-1889
Kodal, Vestfold v. Norway
 Kogarkoite, opt. data, 73-2912
Kola peninsula, Russian SFSR v. USSR
Kolihan, Khetri, Rajasthan v. India
Komatitite, Ontario, extrusive basaltic
 73-4165; *S. Africa*, silicate immiscibili-
 ty in, 73-2033, unusual ultramafic and mafic
 volcanics, 73-884
Kongsberg v. Norway
Kootenay arc, B.C. v. Canada
Kopparberg County v. Sweden
Koraput, Orissa v. India
Koryak Mts., Russian SFSR v. USSR
Kosaka, Akita v. Japan
Kosice v. Czechoslovakia
Kovářská, Bohemia v. Czechoslovakia
Kragerø v. Norway
Kramer, California v. USA
 KREEP, high K, RE & P content, term used
 for lunar rocks, 73-591; also *v. lunar rock*
Kremnica Mts. v. Czechoslovakia
 Krennerite, *Fiji*, 73-3615
Kristiansund v. Norway
Kroksfjordur v. Iceland
Krušné hory v. Czechoslovakia
 Krutaite, *Czechoslovakia*, new mineral,
 73-2945
Krynica v. Poland
Krzyszowice v. Poland
Kuchiré v. Iran
Kunavaram, Andhra Pradesh v. India
Kundulur, Andhra Pradesh v. India
Kungkuan v. Taiwan
Kungnat v. Greenland
Kuraminskiy Mts. v. USSR
 Kurchatovite, hydrothermal synthesis, 73-
 3699
Kurile Is., Russian SFSR v. USSR
Kurram Agency v. Pakistan
Kursk, Russian SFSR v. USSR
Kutnahorite, Bohemia, in Mn deposit, 73-
 2493; *New Jersey*, 73-4370
Kuznetskiy Alatau, Russian SFSR v. USSR
Kvikne v. Norway
 Kyanite, geochem. & colour, 73-280

- Cyanite, (contd.)**
 high-*P* synthesis of 3d-metal substituted, 73-1501; thermal conversion to mullite, 73-1586; *India*, cavity-filling, 73-658; *S. Africa*, reserves, 73-3633; *W. Australia*, economic concentration, 73-992
- Kyrkviken v. Sweden**
Kyushu v. Japan
Kyzylkum v. USSR
- La Alcaparrosa v. Argentina**
La Bajada, New Mexico v. USA
La Gallega, Málaga v. Spain
La Palma, Canary Is. v. Atlantic Ocean
La Ronge, Saskatchewan v. Canada
Labrador, Newfoundland v. Canada
Labradorite v. feldspar
Lac Croche, Quebec v. Canada
Lac Rouvray, Quebec v. Canada
Lachlan, N.S.W. v. Australia
Ladoga, Karelia, Russian SFSR v. USSR
Lägerdorf, Holstein v. Germany
Laguna, Texas v. USA
Lahn v. Germany
Lake Chaluge v. USA
Lake County, California v. USA
Lake District v. England
Lake Geneva v. Switzerland
Lake Gjerdingen, Nordmarka v. Norway
Lake Huron, Ontario v. Canada & N. America
Lake Kivu v. Africa
Lake Maheda v. Uganda
Lake Maurepas, Louisiana v. USA
Lake Michigan v. USA
Lake Pontchartrain, Louisiana v. USA
Lake St. Joseph, Ontario v. Canada
Lake Saline, Illinois v. USA
Lake Storsjön v. Norway
Lake Superior, greigite in sediments, 73-1876;
 Precambrian Fe formations compared with hot spring deposits, 73-3821; also v. *Canada*, Ontario
- Lake Tchad v. Tchad**
Lake Vanda, Wright Valley v. Antarctica
 lake-bottom surveying, gamma spectrometer for, 73-1187
- Lakeview Mts., California v. USA**
Lam-Bodenmais, Bavaria v. Germany
Lamproite, W. Australia, age, 73-2211
Lamprophyre, Alaska, Tertiary dyke province, 73-3050; Germany, mineral paragenesis, 73-677; Hungary, dykes, chem., spectral anal., 73-3022; New Zealand, age of dykes, 73-1132; S. Australia, intrusions of carbonatitic affinities, 73-3046
- Lancaster Valley, Pennsylvania v. USA**
Landau v. Germany
 Landauite, crystal structure, 73-1320, 1321
- Langesundsfiorden v. Norway**
Langsbergite v. moschellandsbergite
Langban v. Sweden
Langisite, Ontario, anal., 73-3554
Langjökull v. Iceland
 lanthanum, & Ce, in alkaline rocks, isotope-excited XRF, 73-1180; trifluoride, crystal structure, 73-2443 to 2446
- Lanzo, Lugano v. Switzerland**
Lapis lazuli, stained, 73-461; Afghanistan, 73-2641; Baffin I., min., 73-1856
Lappland v. Finland
 Larnite, crystal structure, 73-2363
- Larosite, Ontario, new sulphide mineral, 73-3556**
Larvik v. Norway
 larvikite, myrmekite-like intergrowths in feldspars, 73-717; *Norway*, gravity studies, 73-1968
- Larzac, Aveyron v. France**
Las Cruces, New Mexico v. USA
Lashaine volcano v. Tanzania
Lassiter Coast v. Antarctica
 Laterite, & bauxite formation, 73-1659; beneficiation of low-grade, for Al production, 73-3521; historical review, 73-3516; *Guyana*, chem., 73-2515; *India*, extraction of Ni, 73-1433; *Pakistan*, phase composition, 73-3603
- Latite, chem. data on some mins., 73-672**
 Latiumite, crystal structure, 73-3466
- Latosol, Panama, effects of amorphous constituents on min. & chem. props, 73-157**
Laugarvatn v. Iceland
 Laumontite, equilibria & zeolite facies, 73-2623
- Lauterbrunner v. Switzerland**
 Lautite, in system Cu-As-S, 73-1569
- Lavas, equilibration T & P of various types with spinel- & garnet peridotite, 73-354; Africa, from tectonic graben, chem. anal., 73-3800; Comores Archipelago, petrol., 73-885; Derbyshire, geol., 73-4101; East African rift system, tr. elems., origin, 73-503; France, Massif Central, intermediate, nature & origin, 73-1979; Iceland, major & tr. elem. variation during initial cooling, 73-2048; Indian Ocean, evolution of basaltic & differentiated, 73-3089; Italy, K-rich, petrogenesis, 73-2050; Mt. Etna, 1971 eruption, petrog., rheology etc., 73-3084; New South Wales, alkaline, high-*P* megacrysts in, 73-3073; New Zealand, alkaline, RE elems., 73-3796; Scotland, Skye, major elem. variation, 73-857; Zaire, anomalous K/Ar ages, 73-2206**
 — tubes, active formation, 73-962
- Lavendulan, Iran, in Sorbonne collection, 73-3266**
 Lawsonite, *Austria*, pseudomorphs after, in greenschist, 73-3172
- Layered intrusions, relation of magmatic & subaqueous sedimentary structures, 73-2952; Antarctica, density of gabbro, 73-3059; Greenland, from alkali basalt magma, 73-4130; Iceland, gabbro, size-graded igneous layering, 73-3061; New Caledonia, distribution of Cu-Ni sulphides & oxides, 73-902; S. Australia, igneous & tectonic textures, layering, 73-3072; W. Australia, petrol., 73-3071**
- Laytonville, California v. USA**
 Lazarevichite, *Armenian SSR*, first occurrence in USSR, 73-1892
- Lazulite, visible & near-IR spectra, 73-1066**
Rwanda, in phosphate nodules, 73-1925
- Le Puy, Haute-Loire v. France**
 Lead, determination by anodic stripping anal., 73-1165; determination in calcareous materials, 73-2272; extraction of metal from indigenous galena, 73-3520; *Alaska*, geochem. anomalies, 73-285; *Colorado*, mining map, 73-1403; *England*, statistical appraisal of mine distribution, 73-1370; *Japan*, in hot spring deposits, 73-549; *Montana*, mining, 73-1401; *Pennsylvania*, geochem. prospecting, 73-568; *Turkmenia*, movement in brine, 73-1720, 1721; *Wales*, resources, 73-1371
- deposits, mantle origin of major orebodies 73-1628; *Appalachians*, distribution, 73-1394; *Czechoslovakia*, petrol., 73-257; *Idaho*, min., trace elem. content, 73-3619; *India*, zoned with Cu & baryte, 73-273; *Missouri*, genesis & distribution, 73-3579; *New South Wales*, geol., 73-3611; *Norway*, fluid inclusion studies, 73-1412; *Sardinia*, karst concentration, 73-3533; *S. Australia*, 73-2480; *Tennessee*, 73-1461; *Utah*, 73-2511
- isotopes, behaviour during granulite facies metamorphism, 73-1129; in lunar soil, volatile transfer, 73-3926; NAA determination in Apollo 11 fines, 73-3927; silica-gel phosphate anal. method, 73-2740; *British Columbia*, abundances in ores & associated rocks, 73-495; *Idaho & Montana*, & mineralization ages, 73-1143; *Ireland*, in base metal mines, 73-1629; *Missouri*, source for galena ores, 73-3775; *N. America*, in coals, 73-547; *Pacific Ocean*, in volcanics, 73-2063; *Upper Mississippi valley*, re-assessment, 73-3580; *Yorkshire*, in galena, 73-493
- minerals & compounds, descriptions, data, economic, book, 73-92; germanates, synthesis and crystallog. data, 73-372; dislocation distributions, 73-1565, lamellar dendritic growth, 73-325; PbGeO₃, crystal growth, opt. props., 73-1544; sulphide, crystal growth, 73-335, *Kazakhstan & Russian SFSR*, new Bi-sulphides of Ag, Cu, Pb, 73-1945; *Russian SFSR*, new solid solution, (Pd, Pt)₇(Sn, Pb)₂, 73-1944
- ore, low grade, beneficiation, 73-3519; *Manitoba*, age, 73-2234, 3293
- Lead-zinc deposits, classification & distribution of stratified, 73-2299; in sediments, origin, 73-2299; Australia, genesis, 73-3609; Austria, mineralization, 73-3593; Baffin I., origin, 73-2299; British Columbia, fluid inclusion & isotopic studies, 73-1635; Caucasus, differences in different rocks, 73-2500; India, age, 73-1435, 1436; Mississippi valley, fractionation of S isotopes during deposition, 73-3774; Mount Isa, deformation effects on sulphide-rich layers, 73-1442, 1443; Poland, breccias in stratified deposits, 73-3536; Sardinia, stratabound syngenetic, 73-3534; Washington & British Columbia, geol., 73-3568; W. Germany, S isotopes in, 73-3772; Yukon, geol., origin, 73-2482**
- Lead-zinc-silver ores, Queensland, age of formation 73-1130**
 Lead-zinc-silver-cadmium deposits, *Yukon*, S isotopes in, 73-1636, 1637
- Leadhillite, Norway, first occurrence, unusual environment, 73-1083**
- LEBANON, karst rocks & derived soils, chem., X-ray studies, 73-1250**
Lebombo Mts. v. S. Africa
Leduc, Alberta v. Canada
 Legrandite, crystal structure, 73-2437
- Leicestershire v. England**
Leinster v. Ireland
Leitrim v. Ireland
Leka, Trøndelag v. Norway
 Leonardite-trona mixtures, possible economic use, 73-2528
- Lepidocrocite, transformation to goethite, 73-375, influence of silica on, 73-146**
Lepidolite, v. mica
 Leptynites, *Bohemian Massif.*, volcanic origin, 73-2131
- LESOTHO, 601.25 carat diamond, history, 73-2625**
Lesser Antilles v. West Indies
 Leviticite, *California*, on mescagnite, 73-4375
- Leuconorite, New York, inclusions in anorthosite, min., significance, 73-849**
Leucophane, Russian SFSR, 73-2930
Leucophenite, USA, in Green River formation, opt. properties, chem. anal., etc., 73-2814
Lezkowice v. Poland

- Lherzolites, *Arizona & Utah*, xenoliths in kimberlite-bearing breccia, 73-2045;
France, formation of sapphirine-bearing rocks at contact, 73-1802; *New Zealand*, nodules in "mafic phonolites", 73-3075;
Norway, nodules in alkaline complex, 73-3062
- LIBERIA, *Goe Range*, Fe formation & supergene Fe ores, 73-1373
- LIBYA, *Sirta basin*, Gargaf formation, geol., 73-2089
- Lienz, *Tyrol v. Austria*
- Lights Creek, *California v. USA*
- Lignite, *New Jersey*, 73-3243
- Liguria v. *Italy*
- Lilliantite, data on natural and synthetic, 73-765
- Lilloise v. *Greenland*
- Lime, *India*, resources, 73-3645
- Limestones, illitic, dolomitization of, 73-4230; oolitic, Sr in, 73-2700; preferred orientation in experimentally deformed, 73-2566; rhombohedral pores in, & dedolomitization, 73-4226; siliceous dolomitic, metamorphism, 73-4319; structures affecting initiation of caves, 73-1111; surface textures on quartz grains in, 73-4277; weathered, aliphatic hydrocarbons in, 73-1726; *Austria*, Devonian, Sr & Ba content, 73-1685; *Belgium*, clay min. of soils from, 73-1238; *Crimea*, epigenetic recrystallization, 73-3121; *Illinois*, resources, 73-3650; *India*, O & C isotopes in, 73-528; *Iowa*, phys., chem. changes during weathering, 73-1693; *Japan*, state of Mn in, 73-529; *Montana*, mining, 73-1401; *Oklahoma*, resources, 73-1366, 1367, 1489; *Puerto Rico*, luminescence, 73-2173; *Queensland*, metamorphosed corals, 73-1010; *Taiwan*, stress orientation in, 73-2144; *Washington*, resources, chem., 73-3831
- Limonite, classification, 73-3515; *France*, geol. of deposit, 73-3592; *India*, radioactive, 73-2504; *Ontario*, supergene min., 73-3562
- Limousin v. *France*
- Limpopo orogenic belt v. *S. Africa*
- Linarite, oriented transformation, 73-3498; *New Jersey*, 73-4370; *New Mexico*, 73-3252
- Lindströmite, *USSR*, 73-1945
- Linköping v. *Sweden*
- Linnaeite, *Bushveld complex*, 73-756
- Lipscombite, *Ghana*, manganoan, in pegmatite, 73-1816
- Lithiophorite, X-ray, chem., EM anal., 73-1914; *France*, identification in karst deposits, 73-2885
- Lithium, AAS & flame emission spectroscopy analytical scheme, 73-49; isotopic abundances in lunar rocks, 73-3922; pedometer survey, 73-1625; *Canada*, in granitoid rocks, 73-3792; *India*, geochem. in shield complex, 73-504
- compounds, Li-Mg-Zn silicates, crystallization, 73-1581; Li_2TiO_4 , preparation of, containing tetrahedrally coordinated Ti^{4+} , 73-371; nitrate, crystallization on carbonates, 73-1575
- Lithothermal systems, role in magmatic & tectonic processes, 73-4087
- Little Tallahatchie R., *Mississippi v. USA*
- Liveingite, crystal structure, 73-1332
- Livingstonite, *Japan*, EM, X-ray, opt. data, 73-1885
- Lizard, *Cornwall v. England*
- Lizardite, ditrigonal rotation of tetrahedra, 73-2376; in serpentines of ultrabasic intrusions, 73-696
- Llallagua v. *Bolivia*
- Lleyn Peninsula, *Caernarvon v. Wales*
- Löbauer Berg v. *Germany*
- Loch Inchard, *Sutherland v. Scotland*
- Loch Laxford, *Sutherland v. Scotland*
- Lodève, *Hérault v. France*
- Loess, origin of material, 73-4221
- Lofoten Is. v. *Norway*
- Loire Atlantique v. *France*
- Lokapur, *Mysore v. India*
- Löllingite, *Ontario*, anal., 73-3554; *Spain*, Ni-rich, 73-770
- Lomme valley v. *Belgium*
- Lonar Lake, *Maharashtra v. India*
- Longford v. *Ireland*
- Longs Peak, *Colorado v. USA*
- Lorraine v. *France*
- Los Jarales, *Malaga v. Spain*
- Loughlinite, *Wyoming*, 73-1259
- Louisiana v. *USA*
- Louth v. *Ireland*
- Lovozero Tundra, *Russian SFSR v. USSR*
- Lower Silesia v. *Poland*
- Luangwa Bridge v. *Zambia*
- Lublin v. *Poland*
- Lucania v. *Italy*
- Lučenec v. *Czechoslovakia*
- Lucerne v. *Switzerland*
- Lukovská Hora v. *Czechoslovakia*
- Luna 20, studies, 73-2300
- Lunar atmosphere, radon-222 in, 73-2785
- carbon chemistry, simulation study, 73-1753
- craters, dating from photographs, 73-624; lava filled, origin, 73-1757; morphology & origin, 73-3877; origin in maria, 73-3872; *Copernicus*, debris of impacting body, 73-2763
- differentiation model, 73-609, 3943
- dust, polarization of reflected light from 73-2783
- evolution model, 73-3946
- fines, Apollo 14, C chem., 73-1752; Be & Cr contents compared with crystalline rocks, 73-3923; diopside & Cr-Zr-armalcolite in, 73-2756; from deep drill, tr. elems., 73-3874; Luna 20, inert gases in, Ne radiation age, 73-3938, min., petrol., chem., 73-3935, RE, tr. elems. & Fe in, 73-3940, O & bulk element abundance, 73-3937; NAA of trace elems., 73-3903; NAA determination of U & ^{204}Pb , 73-3927; oxide mins. in lithic fragments, 73-2769
- glass, Apollo 11, natural & laboratory crystallization, 73-1746; coating of impact origin, 73-613; formation of spheres, 73-3900; Luna 20, magnetic properties, 73-3950, major elems., 73-3942, major elem. chem. in soil, 73-3875; with high Al_2O_3 in, 73-1748
- highlands, composition & origin, 73-3947
- phenomena, transient, 73-1754
- rocks, Apollo 14, preliminary report, 73-606; ash flows, 73-1749; comparison of Fra Mauro breccias with ejecta from Ries crater, 73-1747; "gray-mottled" basalt, 73-3890; identification in degraded pictures, 73-622; impact metamorphism, 73-3873; meteoritic material in, 73-3905; Mössbauer instrumental anal. of Apollo 12 samples, 73-3899; Mössbauer studies of Apollo 12 samples, 73-3901; solid-type & liquid-type materials, 73-2765; ultrabasic, 73-3871; unusual basalt, 73-2775
- , age determination, 73-607; Apollo 12 material, 73-3917; fission tracks, 73-3925; Luna 20 samples, 73-3938, 3939; Pb isotopes in accessory mins., 73-2771; pre-Imbrian event, 73-2762; revision, 73-3876; U-Th-Pb systematics, 73-3895
- , chemical composition, 73-581
- , 598, 599, 604, 3881; anorthositic, 73-599
- , Apollo 12 samples, 73-586 to 592, RE elems. in, 73-3915, total C & N abundances, 73-3907; Apollo 14, 73-600
- , Apollo 16, 73-2760; Apollo 16 geochem. XRF experiment, 73-605; C, H content & isotopic composition, 73-3910; C & isotopes, 73-3913; C in Luna 16 & 20 samples, 73-3945; comparison of anal. from Surveyor, Apollo & lunar mission, 73-3904; composition, age & occurrence relations, 73-3929; chem., elem. abundances, 73-3928; elemental composition, 73-3914; equilibrium relations, 73-3892; halogens & tr. elems. in Apollo 12 sample, 73-3902; inter-element relationship with stony meteorites, 73-596; Luna 20, K, Rb, Sr, Ba, RE & $^{87}\text{Sr}/^{86}\text{Sr}$, 73-1751
- , KREEP, origin in lunar soils, 73-3888; origin, lunar differentiation model, 73-3943; relationship with associated noritic & anorthositic, 73-3896; K, Th & U abundances, 73-3930; Luna 20, 73-3936, 3948; Li, B, Mg & Ti isotopic abundances, 73-3922; NAA of 40 elems., 73-3916
- , *Ocean of Storms* material, 73-3921
- , O isotope fractionation, 73-3911; $^{18}\text{O}/^{16}\text{O}$, $^{30}\text{Si}/^{28}\text{Si}$, D/H, $^{13}\text{C}/^{12}\text{C}$ ratios, 73-3905
- , Re & Os abundances, 73-3908; RE isotopic anomalies, 73-3912; spark mass spectrometric anal., 73-3906; Sr isotope in Apollo 12 samples, 73-3918; tr. elems., 73-594, 597; U & Th abundances, 73-3919, 3920, distributions, 73-3925; V in rocks & dust from *Ocean of Storms*, 73-3924; vaporization from heated samples, erosion by volatilized alkalis, 73-3891; volatile & siderophile elems., 73-595
- , mineralogy, 73-3880, 3881, 3883, 3885, 3888, 3889; Apollo sample, 73-1750; mineralogy, clinopyroxenes, 73-1745; crystallization history, 73-3894; cristobalite, 73-1744; feldspar, Luna 20, 73-3931; Luna 20 fragments, 73-3933; tridymite, 73-1744; olivines, 73-580, 1745; pigeonite, multiple-twinning & reversely zoned, 73-3879; plagioclase, opt., chem. anal. of Fe, 73-2773; spinels, 73-582, 584, 1745; spinel, ilmenite, rutile, EM anal., 73-2770; "tranquillityite group" new minerals, phase X and phase Y, 73-2950; visible & near-IR spectral reflectivity, 73-3898; zoning in plagioclase, 73-608; Zr-Ti-RE min., 73-3951
- , petrology & petrography, 73-3888, 3881, 3882, 3883, 3885, 3886, 3888; accumulation of olivine, 73-3895; anorthositic rock, 73-581; Apollo-12 crystalline rocks, 73-1745; Apollo 12 igneous rocks, spinels & petrogenesis, 73-2751
- , Apollo 16, 73-2760; Apollo sample, 73-1750; breccias, from lunar highlands, 73-2759; cooling history of basalt, 73-2764; Luna 16 & 20, 73-2761; Luna 20, 73-2772, 3933, 3939, 3951; Luna 20 regolith, 73-2744; origin of cumulae, ANT suite, 73-3935; origin of non-magmatic basalt, 73-591; silicate melt inclusion, 73-3887; olivine fractionation, 73-3899; pyroxenes, exsolution & phase transformation, 73-3932; pyroxene significance in petrogenesis, 73-3893; spinel-troctolite & anorthositic, 73-2757
- , physical properties, electrical conductivity, 73-616; e.p.r. of radiative damage in, 73-2784; fossil track thermoluminescence studies, 73-2779; remanent magnetization, 73-2779; remanent magnetization, 73-2779; remanent magnetization, 73-2779

- lunar atmosphere, physical properties, (contd.)
 ent magnetism, 73-1755; viscosity of melts of lunar composition, 73-3885
 - soil, Apollo 14 chem. anal., 73-601; chemical composition 73-587 to 590, 592; Luna 20, chem., surface morphology of particles, 73-2776, 3936; Luna 20, data, 73-2767; Luna 16 & 20, halogens in, 73-3953; Luna 20, abundance & composition of phases in 45-125 micron fraction, 73-3952, chem. & thermal history of metal particles, 73-3941, chem. composition, 73-3948, lithic fragments, 73-3935; min. & petrol., 73-3934, O & Si isotope ratios, 73-3954, radiation damage, 73-3944, tr. elem. abundances, 73-3949, U-Th-Pb measurements, 73-3946; min., chem., origin of KREEP, 73-3884; O isotopes in, 73-2777; Pb isotopes & volatile transfer, 73-3926; remanent magnetization, 73-1756; visible & near-IR transmission & reflectance measurements, 73-2778; volatile-rich, 73-2761; *Sea of Fertility*, petrol., chem., 73-603
 - surface, influx of micrometeoroids, 73-618; selective volatilization, 73-2766
 - xenon, solar flare effects in, 73-619
 UXEMBOURG, Ardennes, octahedral cleavage of pyrite, 73-3204
 uzon v. *Philippines*
 uzonite, in system Cu-As-S, 73-1569; *Peru*, crystal structure, 73-3487; *Taiwan*, crystal forms, 73-1867
 yłowek Śląski v. *Poland*
 yngen, Troms v. *Norway*
- Aastrict v. Netherlands*
 Jackenzie R., N.W.T. v. *Canada*
 Jackinaw Creek, Idaho v. *USA*
 Jackinawite, opt., chem. data, parageneses, 73-4059; *Bushveld Igneous complex*, 73-756
 Jacon County, N. Carolina v. *USA*
 Jacuarie Ridge v. *Tasman Sea*
 Jadan v. *Bulgaria*
 Jaden v. *Turkey*
 Jadhya Pradesh v. *India*
 Jadhya v. *Atlantic Ocean*
 Jadora, N. Dakota v. *USA*
 Jadrars v. Tamil Nadu, *India*
 Jadriv v. *Spain*
 Jafic rocks, fenitization in, 73-4306; K-rich, origin, 73-1578; of gabbroid associations, classification, 73-3029; *India*, petrog., modal anal., 73-1040; *S. Carolina*, petrol. 73-2003; *Ukrainian Shield*, chem. composition, 73-2687
 Jafgalen Is., Gulf of St. Lawrence v. *Canada*
 Jafhemite, *Canada*, occurrences, 73-739; *Czechoslovakia*, in ferrolites, 73-1904
 Jafmagas, ascending, pressures & temperature gradients, 73-3231; convection, temperature distribution, & differentiation, 73-816; course of crystallization in alkali granite, 73-886; distinction between alkaline & shoshonitic by TiO₂ content, 73-817; effect of H₂O on composition at high P, 73-353; rising at oceanic ridges, differentiation & gravitational driving force, 73-4178; *Mt. Etna*, 1971 eruption, 73-3084
 Magmatic processes, at ocean ridges, 73-3064; dynamic control, 73-4090; role of lithothermal systems in, 73-4087
 Magmatic sediments, relation of magmatic & subaqueous sedimentary structures, 73-2952
 Magmatism, & tectonic settings, 73-1948
 Magnesioferrite, *New Jersey*, 73-4370
 Magnesite, activity-product constant, 73-2598; crystallization from aqueous solutions, 73-2597; hydrothermal growth of single crystals, 73-3717; in serpentine areas, origin, 73-297; manometric determination, 73-4067; thermometric determination of Ca & Mg oxides, 73-2264; *Czechoslovakia*, quantitative anal. by IR spectrophotometry, 73-1189; *Italy*, mesitite specimens, 73-3240; *India*, DTA studies, 73-787; *Norway*, white crystalline, in serpentine, 73-788; *Ontario*, genesis of deposit, 73-2522; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341; DTA studies, 73-3639; *S. Africa*, origin of deposits, 73-3523; *Spain*, X-ray, DTA, TGA, chem., 73-1919; *Tyrol*, geol., texture of deposit, 73-4241
 Magnesium, AAS analytical scheme, 73-48; determination by compleximetric titrations, 73-54; isotopic abundances in lunar rocks, 73-3922
 — minerals & compounds, chlorophosphate, crystal structure, 73-2433; determination of co-ordination number, 73-1280; Li-Mg-Zn silicates, crystallization, 73-1581; MgCr₂O₄-MgFe₂O₄ series, equilibrium studies, 73-365; Mg(OH)₂ dehydration, activation energy evaluation, 73-2581; Mg(OH)F, stability field, 73-392; β-Mg₂SiO₄, crystal structure, 73-216; oxide polycrystalline, microyield & fracture, 73-3213
 Magnet Core, *Arkansas v. USA*
 Magnet Heights, *Bushveld complex v. S. Africa*
 Magnetic anomalies, *Fennoscandia*, & geology, 73-2957
 Magnetism, remanent, of lunar rocks & soils, 73-1755, 1756; stable remanent, in dolerite, 73-1077; of Moon, comparison with Earth, 73-1755; *Mid-Atlantic Ridge*, of basalts, 73-3226; *Montana*, in volcanic rocks, 73-3230
 Magnetite, carbonatization in Precambrian ferruginous quartzite, 73-3120; changes in content & fabric during ferritization, 73-2028; composition in carbonatites, 73-740; experimental deformation of polycrystalline ores, 73-1519; Ti-, & coexisting ilmenite, Mn fractionation, 73-1653; *Alaska*, Cr-Al variety in Pt nugget 73-4040; *Canada*, origin of deposit, 73-282; titaniferous, ferride element content, 73-283; equilibrium with ilmenite in Upper Layered Series, 73-738; *India*, exsolution textures, 73-741; ores, min., chem., 73-4043; *Kazakhstan*, hornfels associated with skarn type, 73-269; *Italy*, specimens, 73-3240; *Michigan*, 73-1102; *Nevada*, & coexisting ilmenite in zoned ash-flow sheets, 73-2883; *New Jersey*, concentrations, 73-1386; *Norway*, EM anal., 73-1906, microtextures, 73-4044, potential ore, 73-3590; *Ontario*, *Sudbury*, occurrence, composition, 73-4045; *Poland*, spherules of cosmic origin in salt deposits, 73-3977; *Russian SFSR*, beach sand deposits, 73-1428; *Taiwan*, from beach sand, chem., 73-1907; *W. Australia*, as lamellae in pyrrhotite, 73-2889; *Yugoslavia*, specimens, 73-4362
 Magnetitites, *Bushveld complex*, apatite-bearing, origin, 73-878, geol., 73-876
 Maharashtra v. *India*
 Main Colliery, *Yorkshire v. England*
 Maine v. *USA*
 Mainland, *Shetland Is. v. Scotland*
 Mainz v. *Germany*
 Makhtesh Ramon v. *Israel*
 Malachite, manometric determination, 73-4067
 Málaga v. *Spain*
 MALAGASY REPUBLIC, south, granulite facies rocks, geochem., 73-2139
 Malakand v. *Pakistan*
 MALAYSIA, archaeological radiocarbon dates, 73-1135; *Sabah & Sarawak*, geol. of caves, newberyite, brushite, colophane, variscite, 73-800; *Sarawak*, *Bau*, anti-monian idocrase data, 73-657
 Malvern Hills v. *England*
 Manche v. *France*
 Mangan-axinite, *Minnesota*, chem. anal., opt. props., cell dimensions, 73-667
 Manganese, fractionation between coexisting titaniferous magnetite & ilmenite, 73-1653; leaching by sea-water from mafic volcanic material, 73-2559; non-destructive NAA, 73-73; rapid spectrophotometric determination in rocks, mins. & Ti ores, 73-1162; variation in oxide component in marine sediments, 73-2712; *Atlantic Ocean*, tr. elem. composition, 73-3756; *Japan*, distribution & state in limestones, 73-529, 530; *Lake Superior*, enriched layers in Holocene sediments, 73-3822; *Montana*, content & distribution in batholith, 73-1667
 — compounds, chlorophosphate, fluorophosphate, crystal structure, 73-2430; hydrous oxides, adsorption & coprecipitation of Ag on, 73-486; oxides, effect of P on marine deposition, 73-1498, poorly crystallized, sorption of Ag by, 73-3703, *Bavaria*, dendrites, 73-3264
 — deposits, origin, 73-2464; *Appalachians*, distribution, 73-1394; *Bohemia*, min. paragenesis, 73-2493; *Brazil*, 73-1407; *Czechoslovakia*, genesis, 73-1418; *Egypt*, geol., origin, 73-2496; *Ethiopia*, marine sedimentary, 73-3785; *India*, min., genesis, 73-2478, powdery, sedimentol., 73-1432; *Mexico*, rare mins. in geodes, 73-2465; *Tennessee*, 73-1461; *Wales*, resources, 73-1371; *Zaire*, min. & sedimentology, 73-2299
 — mineralization, *N. Wales*, 73-4099
 — nodules, Fe-poor, diagenetic formation, 73-3823; marine, aragonite vein fillings in, 73-4066, nature of iron oxide phase, 73-1697; significance of radioactivity in growth rate, 73-1695; *Atlantic Ocean*, chem. composition, 73-531; *Lake Michigan*, As content, 73-1696
 — ores, marine sedimentary, source of metals, 73-491
 Manganite, RE-, catalysts in reduction of N oxides, 73-3702
 Mangualde v. *Portugal*
 Manicouagan, *Quebec v. Canada*
 Manitoba v. *Canada*
 Maniwaki, *Quebec v. Canada*
 Mansehra v. *Pakistan*
 Mantle, origin of ore deposits, 73-1341; role of water in, 73-352; seismic anisotropy, 73-4177; *Africa*, south, depth of top of, 73-4096; *Newfoundland*, *Appalachian*, 73-1947
 —, upper, min., chem. & isotopic composition of model, 73-837; Pb & Sr isotope evolution, computer simulation, 73-2650; variation in K content & garnet lherzolite nodules in kimberlite, 73-832; *Canada*, structure, composition, 73-846; *India*, & petrochem. of peridotite dykes, 73-834; tectonic setting in Precambrian, 73-836
 Manto Esperanza, *Atacama v. Chile*
 Mapumulo v. *S. Africa*

- Maps, preparation for engineering geol., 73-3263
- Maratoto Valley v. New Zealand*
- Marble, siliceous, experimental data for reactions in, 73-2575; *Japan*, chem. anal., lattice constants of calcite, 73-783
- Marblehead, Wisconsin v. USA*
- Marbrige, Quebec v. Canada*
- Marcasite, in fossilization, 73-4052
- Margarite v. mica*
- Marie Byrd Land v. Antarctica*
- Marine formations, quartz criteria, 73-2085
- Mariposa County, California v. USA*
- Mariupol' v. USSR*
- Marls, USA, for control of SO₂ in flue gases, 73-3652
- Marquesas Is. v. Pacific Ocean*
- Marquette County, Michigan v. USA*
- MARKS, circularity of craters, 73-2186; composition of white clouds, 73-3257; distribution of surface materials, 73-1108; doublet craters, 73-1109; dynamic props., internal structure, 73-1071; heat balance of polar caps, 73-1107; O₂ in atmosphere, 73-3259; variation in craters, 73-1110; wind regimes, 73-1106
- Martuna, Azerbaijan SSR v. USSR*
- Maryland v. USA*
- Mascagnite, *California*, 73-4375
- Mascot, Tennessee v. USA*
- Mass spectrometry, data storage, 73-2261
- Massachusetts v. USA*
- Massicot, *Tasmania*, 73-1091
- Massif Central v. France*
- Mastki v. Poland*
- Masuyite, *Katanga*, in Sorbonne collection, 73-3266
- Matildite, *USSR*, 73-1945
- Matsuo, Iwate v. Japan*
- Maucherite, crystal structure, 73-3488; *Bushveld complex*, 73-756; *Ontario*, anal., 73-3554; *Spain*, in chromite-niccolite rocks, 73-770
- Mauna Kea, Hawaii v. USA*
- Mauna Ulu, Hawaii v. USA*
- Mau, Hawaii v. USA*
- Maures massif, Var v. France*
- MAURETANIA, *Fort-Trinquet*, crystallochem. of amphiboles in granitic rocks, 73-678
- Mawsonite, *Russian SFSR*, data, 73-2904
- Maymecha R., Siberia, Russian SFSR v. USSR*
- Mayo v. Ireland*
- Mbara v. Uganda*
- Mckinstryite, *Canada*, phys., chem., crystall. props., 73-1886
- McMurdo area v. Antarctica*
- Mealy Mts., Labrador v. Canada*
- Medak, Andhra Pradesh v. India*
- Medicine Bow Mts., Wyoming v. USA*
- MEDITERRANEAN SEA, magnetization of sediment, 73-3222; east, destruction of montmorillonite in sapropelic muds, 73-203; *Gulf of Lions*, formation of gypsum in land-locked lagoons, 73-2909; *Straits of Gibraltar*, sediments, min., geochem., 73-3115
- Megabreccias, *Queensland*, structural setting & origin, 73-946
- Megacrysts, high-*P*, *New South Wales*, in alkaline lavas, chem. anal., 73-3073
- Mekong delta v. S. Vietnam*
- Melanophlogite, *Bohemia*, in Mn deposit 73-2493; *California*, opt., phys., chem. data, 73-1855
- Meldon, Devon v. England*
- Melilite, configurational entropies, 73-2548; crystallization in system CaO-MgO-Al₂O₃-SiO₂, 73-443; *Quebec*, formation in carbonatite complex, 73-3079, EM anal., 73-2820
- Mellilites, *Italy*, kalsilite-, chem., 73-4141
- Mellite, *Germany*, crystal structure, 73-2422
- Melmerby, Cumberland v. England*
- Melnikovite-pyrite, *Bushveld complex*, 73-756
- Mendozite, crystal structure, 73-1328
- Menezhinite, *California*, 73-4372
- Mercury, determination, by cold vapour technique, 73-3338, by flameless absorption spectrometry, 73-52, by NAA, 73-71, 77, in soils by flameless AAS, 73-1168; distribution in meteorites, 73-3957; in nature, review, 73-473; in permafrost regions, 73-545; non-magmatic source, 73-1356; solubility of HgS, HgSe & HgTe in, 73-1531; trace determination in soils and rocks, 73-1169, 1170; Zeeman spectrometer for measurement of atmospheric vapour, 73-2308; *Alabama*, in river sediments, 73-2696; *Atlantic Ocean*, in deep sea sediments, 73-2697; *Canadian Shield*, in Precambrian shales, 73-1682; *Colorado*, mineralization related to thermal springs, 73-1658; *Ireland*, as guide to sulphide mineralization, 73-2308; *Lake Huron*, in sediments, 73-3819; *Lake Ontario*, in sediments, 73-2695; *Russian SFSR*, age of mineralization, 73-266, 2501; *Switzerland*, in lake sediments, 73-1680, 1681; *USA*, determination in coals, 73-546
- compounds, hydrothermal crystallization of HgSe & HgTe, 73-332; HgBr₂, used as heavy liquid, 73-2250
- deposits, *Austria*, geol., 73-256; *Russian SFSR*, zoning, 73-1375; *Spain*, diagenetic pyrite & sulphides, 73-2299
- Mertieite, *Alaska*, new mineral, 73-2946
- Merumite, *Guyana*, in placers, 73-754
- Merwinite, crystal structure, 73-1292, 2363; Sr and Ba substitution, 73-397; stability, 73-1588
- Mesabi Range, Minnesota v. USA*
- Mesitite v. magnesite
- Metabasites, *Austria*, metamorphosed, chem., 73-3842; *Italy*, petrol., 73-4334; *New Zealand*, progressive metamorphism, 73-2145
- Metakaolin, high-*P* forms, 73-3742; reactions with single & mixed bases, 73-1609
- Metal alloys, XRF technique, 73-3351
- Metal deposition, & c.e.c., 73-1646, 1647
- Metal deposits, non-ferrous, development in geol. time, 73-2451
- Metals & ores, book, 73-1211
- Metals, with close-packed hexagonal structures, nonideal axial ratios, 73-1272
- Metallagenesis, review of theories, 73-3513
- Metallagenetic provinces, Precambrian, correlation, 73-2479
- Meta-lodevite, *France*, new mineral, 73-1940
- Metamict minerals, systematic review, 73-747
- Metamict state, study of "neotantalite", a microcline, 73-2887
- Metamorphic facies, book, 73-2311; plurifacial metamorphism, 73-3169; significance of piemontite, 73-3994; staurolite sub-facies boundaries, 73-1587; Ti & alkali content of biotite in, 73-483; *Bohemian massif*, in Precambrian, 73-1050; *Chile*, outline, 73-852
- rocks, biotite in, variation of length-thickness ratio, 73-4012; composition of chlorite in, and relation to origin, 73-700; muscovite-bearing, palaeothermometry, 73-1827; petrology, book, 73-93; *Appalachians*, map, 73-1034; *Canadian Cordillera*, map, min., 73-844; *India*, structure dependent zoning, 73-4339; *Norway*, high-grade petrol., 73-4321
- Metamorphism, as an ore-forming process, 73-1346, 1347; burial, of Precambrian sediments, 73-4302; contact, analytical simulation, 73-1008; degree indicated by $\alpha \rightleftharpoons \beta$ quartz transformation, 73-720; granulite facies, behaviour of Pb isotopes during, 73-1129; low grade & epigenetic diagenesis, 73-2100; of lunar rocks by meteoritic impact, 73-3873; sulphide-silicate reactions in metasediments, 73-1020; *Africa, south*, as guide to depth/top of mantle, 73-4096; *Austria*, O isotopes in mins., 73-3843; *Antarctica*, ages, 73-1138; *British Columbia*, almandine-garnet isograd, 73-2147; *California*, blueschist, 73-2153; *France*, polyphase, petrol. chem. anal., 73-1014; *India*, ages, 73-3289; *Italy*, lawsonite-albite facies, 73-2132; *Maine*, prehnite-pumpellyite facies, 73-2148; *New Zealand*, of metabasite rocks, progressive, 73-2145; *Norway*, convergent, of eclogites & dolerites, 73-4320
- Metapelite, compositional change of garnet in, 73-3986; metamorphic stages of low-*P*, high *P*, 73-3675; plotting of theoretical *P-T* diagrams, 73-355
- Metasomatic processes, shown by differential equation, 73-307
- Metasomatism, alkali, diffusion zone, experimental modelling, 73-1598; fact analysis in investigation, 73-3868; gabbro-syenite as a product of, 73-1026; recent views, 73-4093; *Finland*, magnesian, 73-1025; *India*, albization & silicification of pelitic rocks, 73-3151; *Scotland*, carbon dioxide, in Carboniferous lavas, 73-314
- Metastibinite, stability, 73-3713
- Meta-torbernite, *Switzerland*, in granite gneisses, 73-4363
- Metazeunerite, *Iran*, in Sorbonne collection, 73-3266
- Metastrengite v. phosphosiderite
- Meteorites,

meteorites, (contd.)

- , fossil cosmic-ray track studies, 73-629;
- , fossil tracks in Angra dos Reis, 73-637;
- , material in lunar samples, 73-3905;
- , micrometeoroids on lunar surface, 73-618;
- , of archaeological interest, 73-2789;
- , *California*, catalogue, 73-3955; *Canada*, catalogue of National Collection, 73-639;
- , *Michigan*, description, 73-3956
- , age determination, Ca-rich achondrites, 73-3959; exposure age of Bruderheim chondrite, 73-3971; gas retention chronology of Petersburg, etc., 73-638; I-Xe age of magnetite in Orgueil chondrite, 73-3963; stony meteorites ^{14}C terrestrial ages, 73-1767
- , chemical composition, Bi in stony meteorites & standard rocks, 73-1764; Ca, Al, Na & K abundance relations in carbonaceous chondrites, 73-3975; Fe transport in chondrites, 73-1762; fractionation in Fe meteorites & interpretation, 73-1760; fractionation patterns in chondrites, 73-3966; Ga & Ge in metal & silicates of L- & LL-chondrites, 73-3961; Ga isotopic & elemental abundance, 73-577; glassy coating on lunar rock, 73-613; ^3He , ^{21}Ne & ^{38}Ar from target elems. in Bruderheim chondrite, 73-3971; Hg distribution, 73-3957; high-T condensates in chondrites, 73-3970; inter-element relations between tr. elems. in primitive carbonaceous & unequilibrated ordinary chondrites, 73-3967; inter-element relationships with lunar rocks & fines, 73-596; Ir & Al association in L-chondrites, 73-3969; Nb in, 73-1763; mesosiderites, 73-3958; noble gas & C abundances in 3 ureilites, 73-3960; noble gases in 11 H-chondrites, 73-3964; polarographic determination of Co and Ni, 73-81; Pultusk meteorite, 73-630; RE abundances in 10 chondrites, 73-3965; refractory tr. elems. in Ca-Al inclusion in Allende meteorite, 73-3972; tr. elems. in chondrites, 73-2793; XRF of Ni, Ge, Ga in Fe meteorites, 73-2283
- , craters, chem. of Aouelloul glass & local sandstone, 73-1774; *Chile*, *Monturaqui*, impactite, petrog. & EM study, 73-644; *Germany*, *Ries*, polymict crystalline breccias, petrog., shock metamorphism, 73-645, shock-induced deformations in biotite, 73-1776, shock produced rock glasses, 73-1775; *India*, in basalt, 73-3976, possible impact structure, 73-1778; *Quebec*, *Charlevoix*, relation of Palaeozoic rocks, 73-2795
- , falls & finds, Frost's rule for spatial sorting of fragments, 73-632; *Bohemia*, spheroidal microparticles in recent alluvium, 73-1777; *Sahara*, *Zerhamra*, 73-2790; *W. Australia*, australite core, 73-641
- , isotopic studies, $^{37}\text{Ar}/^{39}\text{Ar}$ activity ratios, 73-1761; ^{13}C enrichment in carbonate phases of carbonaceous chondrites, 73-636; C isotope fractionation in Fischer-Tropsch synthesis, 73-625; cosmogenic radionuclides in carbonaceous chondrites, 73-1766; rare gases in carbonaceous chondrites, 73-1765; Xe in carbonaceous chondrites, 73-3974
- , mineralogy, chondrules in Fe meteorite, first occurrence, 73-627; iron-free pigeonites in chondrites, 73-1592; Kiel chondrite, 73-3962; of chondrites, 73-628; Pultusk meteorite, 73-630; review of problems, 73-640; Ti^{3+} fassaite, 73-3460; troilite, X-ray and Mössbauer studies, 73-626
- , organic compounds, amino-acids in carbonaceous chondrites, 73-634; amino-acids in Orgueil meteorite, 73-1769; anal. of Murchison meteorite, 73-3968; aromatic hydrocarbons in Murchison meteorite, 73-635; formaldehyde in Allende meteorite, 73-1768; heterocyclic, from carbonaceous chondrites, 73-3973
- , origin, accretion *T* of H-, LL- & E-chondrites, 73-3966; book, 73-2309
- , petrol. & petrog., of chondrites, 73-628; Pultusk meteorite, 73-630; pyroxene crystallization in chondrules, 73-2792
- , physical properties, remanent magnetism, 73-2794; sp. gr. of mesosiderites, 73-3958
- MEXICO, cumengéite specimen in Sorbonne collection, 73-3266; localities for fluorite specimens, 73-3238; *Arizpe*, polybasite, data, 73-1772; *Chihuahua*, rare Mn mins. in geodes, 73-2465, SEM study of mins. in geodes, 73-2184, *Naica*, tennantite-tetrahedrite, 73-763; *Coahuila*, fluorite deposits, stratigraphic control, 73-293; *Estola*, flint clay by hydrothermal alteration of shale, 73-205; *Michoacan*, alteration of volcanic rock to endellite, 73-204, hydrothermal kaolinization, 73-197; *Oaxaca*, *Etlá*, zeolites in sedimentary rocks, first occurrence, 73-4297; *San Lorenzo Tenochtitlan*, obsidian trade & sources, 73-572; *Valley of Mexico*, volcanics, petrog., 73-921, opaque min., 73-3055; *Yucatan*, mixed-layer kaolinite-montmorillonite, 73-188; *Zacatecas*, *Providencia stock*, Cl content as prospecting tool, 73-1742
- Meymechite, *Siberia*, dykes with vitreous margins, 73-3023, tuffs, new data, 73-3024
- Mibladen v. Morocco
- Mica, ammonium, formation & stability conditions with NH_4 -feldspar, 73-1501; & vermiculite, cation exchange selectivity, 73-2315; clay size weathered, selectivity effect of Cs on, transmission EM, 73-102; computer simulation of cation distribution in octahedral layers, 73-227; dating by fission-track method, 73-2239; distribution of alkaline elements between biotite & muscovite in granitic rocks, 73-688; dodecylammonium-, complexes, factors affecting exchange reaction, 73-427, reaction products, 73-173; electron energy loss spectra, 73-2380; interaction forces between sheets at small separations, 73-3464; ion selectivity by weathered, 73-116; stability in mantle, 73-352; structural factors controlling stacking sequences in dioctahedral, 73-228; structures, review, 73-2377; thermal conductivity measurement, 73-4346; trioctahedral, effect of cation substitution on phys. properties, 73-2840, laboratory alteration, 73-3741; van der Waals dispersion forces, 73-1063; weathering of, 73-3419; weathering rates related to type & composition, 73-695; *Alps*, potassic white, & metamorphism, 73-2837; *Bavaria*, in eclogite, phys., chem. data, 73-2818; *Bohemian Massif*, in lamprophyres, chem., 73-2839; *England*, Li-Al varieties, chem., opt., phys., X-ray data, 73-4017; *France*, white in low grade schists, EM anal., 73-2841; *Manitoba*, Li-Rb-Cs, in pegmatite, chem., opt. & X-ray diffraction studies, 73-2838
- , biotite, & coexisting Ca-amphibole, principal component anal., 73-3760; & muscovite, paragenesis in granite, 73-4014; coexisting varicoloured in migmatitic rocks, 73-4008; composite elec-
- tron-diffraction patterns, 73-3461; deformation of experimentally shocked, 73-419; determination of F by microprobe, 73-64; experimental deformation of single crystals, 73-2565; in calc-alkaline intrusives, 73-4009; K-depleted, IR spectra of structural OH of, 73-420; Mössbauer spectra, 73-1304; oxidation of ferrous iron, 73-418; oxidation of octahedral Fe, 73-3738; biotite phase relations of aluminous, in silica deficient system, 73-2613; Ti & alkali content in metamorphic facies, 73-483; variation of length-thickness ratio in metamorphic rocks, 73-4012; Zn content in granitic, 73-692; *California*, & coexisting hornblende from granitic rocks, 73-2836; *Czechoslovakia*, chem. anal., petrogenetic significance, 73-690, chem. composition in metamorphics, 73-1792; *Germany*, chem., 73-1830, in lamprophyres, min. data, 73-677; *Greece*, in volcanic rocks, X-ray diffraction study, 73-4010; *India*, from basic schlieren, data, 73-4011; *Norway*, Ti-rich, secondary in eclogite, EM anal., 73-694; *Ontario*, in ijolite, composition, 73-2868; *Poland*, natural radioactivity in granitoid rocks, 73-4013; *Russian SFSR*, in crystalline basement, 73-689; *Switzerland*, K/Ar ages, 73-3284; *USA*, from intrusives, Cl content, 73-3761; *Vermont*, orbicules in granitic rocks, 73-2040
- , celadonite, solid solution & stability, 73-1604
- , ferriphlogopite, Mössbauer study, 73-2378
- , fluorphlogopite, synthetic, crystal structure, 73-3462
- , gümbelinite, ditrigonal rotation of tetrahedra, 73-2376; indicator of sedimentary rock alteration, 73-1834; *Germany*, Cavariety, in lamprophyres, min. data, 73-677
- , hydromuscovite, *Japan*, chem. anal., X-ray, 73-177
- , illite, chem. composition, 73-3405; illite, determination of crystallinity, 73-1217; experimental conversion to smectite, 73-1231; fabric of floccules, 73-151; morphological effects from K depletion, 73-3383; SEM study of fired, 73-428; surface area, 73-130; *Algeria*, 1 M, well-crystallized, in sandstone, 73-3406; *Atlantic Ocean*, in aeolian dusts, 73-2088; *France*, pure, data, 73-3407; *Germany*, in lamprophyre, min. data, 73-677; *Wisconsin*, electron-optical observations, 73-184
- , lepidolite, *Elba*, 2 M_2 -, crystal structure, 73-3465; *S. Dakota*, 73-2538
- , lepidomelane, thermochemical parameters, 73-2553
- , margarite, *New Jersey*, 73-4370; *Tyrol*, occurrence & breakdown in amphibolites, 73-4016
- , muscovite, & biotite, paragenesis in granite, 73-4014; astrolite identical to, 73-686; equilibrium with K-feldspar & quartz, 73-431; fission track annealing, 73-341; microporosity of sheets, 73-685; muscovite palaeothermometry, 73-1827; plus quartz, high T stability, 73-3737, melting, 73-1601, 1602; reorganization by dehydroxylation, 73-1305; standard free energy of formation, 73-311; structural imperfections, 73-3452; X-ray & electron diffraction study, 73-3 463; X-ray diffraction line profiles, anal., 73-684; *Alps*, b dimensions in low-grade metamorphics, significance, 73-1826; *Belgium*, in pelitic

- Mica, muscovite, (*contd.*)
rocks, X-ray powder data, 73-4327; *California*, distribution in mining area, 73-4128; *Czechoslovakia*, with high Cr_2O_3 , 73-687; *Italy*, in phyllites, 73-4015; *Norway*, red, in gneiss, 73-1828; *Switzerland*, K/Ar ages, 73-3284
- , paragonite, ditrigonal rotation of tetrahedra, 73-2376; *Austria*, age in schists, 73-4331; occurrence & breakdown in amphibolites, 73-4016
- , phengite, *Italy*, in phyllites, 73-4015
- , phlogopite, & coexisting sanidine, K & Rb distributions, 73-3745; development in low Mg rocks, 73-4007; electrical conductivity, 73-3206; e.s.r. of Fe^{3+} , 73-2379; extraction of interlayer K from, 73-115; fission track annealing, 73-341; growth mechanism & polytypism, 73-1603; in shoshonitic association, chem., 73-672; K-depleted, effect of particle size on K sorption, 73-3384, on K exchange, 73-3385, stretching frequencies of structural hydroxyls of, 73-108; morphology of nucleus, 73-1500; + calcite + quartz = tremolite + K-feldspar + H_2O + CO_2 , 73-2614; radiation damage in, 73-1150; repeated Na TPB-alteration and K-fixation effects, 73-124; *Czechoslovakia*, chem. anal., petrogenetic significance, 73-690, chem., phys. data, alteration products, 73-693
- , sericite, transformation into a mixed-layer min., 73-107
- , zinnwaldite, *Scotland*, in granite, chem. anal., 73-1829
- Michael gabbro, *Labrador v. Canada*
- Michenerite, *Bushveld complex*, possible occurrence, 73-756; *Ontario*, redefined, 73-2899
- Michigan v. USA
- Michoacan v. Mexico
- Micrinite, origin, 73-3107
- Microhardness values, for orthogonal mins., 73-2903
- Microelite, metamict, 73-2887; *Manitoba*, EM anal., 73-2888; *S. Dakota*, 73-2538
- Micro-organisms, geological significance, 73-476
- Microscope, Vickers projection, electrical traversing accessory for, 73-2240
- Mid-Atlantic ridge v. Atlantic Ocean
- Midlothian v. Scotland
- Migmatites, *Brittany*, structural & metamorphic features, 73-1057; *Germany*, petrol., 73-1058; *India*, petrog., 73-4337, with rapakivi structure, 73-1059; *Sweden*, genesis, 73-3160, 3161
- Migmatization, *India*, ore genetic significance of geochem. trends, 73-490
- Migneint v. Wales
- Millerite, *Bushveld complex*, 73-756; *Quebec*, assemblages in sulphide deposit, 73-1874
- Milowice v. Poland
- Mimetite, visible & near-IR spectra, 73-1066
- Mina Santa Ana, *Sierra Gorda v. Chile*
- Minals, variable composition mins., problems of extreme states, 73-306
- Minami-osumi v. Japan
- Minas Gerais v. Brazil
- Mindigi, *Shaba v. Zaire*
- Mineral analysis, circular thin-layer chromatography, 73-3341
- , collections, Kō collection, *Kyushu University, Japan*, description, 73-1089; *Paris, Sorbonne*, 73-3266
- , concentration, without hydrothermal sources, 73-2655
- , exploration, & continental drift, 73-1351, 1352; assessment of single drill hole, 73-3511; coefficient of variation in sampling, 73-244; concepts in, 73-241; gamma spectrometer for sea- or lake-bottom surveying, 73-1187; induced electrical polarization in ultramafic rocks, 73-1380; mineralized solution-collapse structure models from drilling statistics, 73-1398; review of 1971 literature, 73-248; use of Cl content of intrusives, 73-1742; *Canada*, relation of occurrences to structural lineaments, 73-845; *Canada, N.W.T.*, summary, 1966 to 1968, 73-279; *Guyana*, in tropical rain forest, 73-1406
- , identification, by far IR interferometric spectroscopy, 73-83
- , names, Mac vs. Mc, 73-1933
- , micromounts, book, 73-95
- , resources, book, 73-2313, resources potential of marine deposits, 73-247
- , samples, rapid quantitative anal. using air pycnometer, 73-2249
- , synthesis, use of Al-amalgam, 73-312
- , supplies, future demands, 73-1342
- , surfaces, rate of hydrocarbon desorption from, 73-1510
- Mineralization, & hydraulic fracturing, 73-243; role of gaseous phase in formation of magmatic complexes, 73-2672; stratified, associated with reefs & dolomitization, 73-251; zones of, explanation, 73-1350; *Japan*, in Au-Ag deposit, & quartz fabrics, 73-3069; *New Brunswick*, related to tectonic evolution, 73-3567; *Sardinia*, & karst development, 73-3533
- Mineralogical bibliography, *Poland*, 1965-1969, 73-4377
- , distributions, sampling of non-Gaussian, 73-2652
- Mineralogy, cosmic, review of problems, 73-640; mantle, high-*P* Mössbauer spectroscopy in, 73-3319
- Minerals, determinative tables, 73-2301; litter at collecting sites, 73-2188; More about minerals, book, 73-1202; radiation damage in, 73-1150; Rocks, minerals & gemstones, book, 73-1200; series of relative RE affinities, 73-2667; The world of minerals, book, 73-1197
- Minia Seamount v. Atlantic Ocean
- Minnesota v. USA
- Minusinsk, *Russian SFSR v. USSR*
- Mir, *Yakutia, Russian SFSR v. USSR*
- Mirabilite, *Antarctica*, spectrographic anal., age of associated seal bones, 73-781
- Miserite, *Arkansas*, pink aggregates, 73-1099
- Mission Range, *Montana v. USA*
- Mississippi v. USA
- Mississippi Valley v. USA
- Missouri v. USA
- Mistatin Lake, *Labrador v. Canada*
- Mitate, *Miyazaki v. Japan*
- Mitchell County, *N. Carolina v. USA*
- Mitchell's Creek, *N.S.W. v. Australia*
- Mitterberg, *Salzburg v. Austria*
- Mixed layer clay minerals, formation by extraction of K from mica, 73-421; illite-montmorillonite, crystal structure, 73-1306; kaolinite-montmorillonite, diffraction patterns, 73-3382; mica-montmorillonite, IR studies, 73-99; micas, differential release of K from, 73-113; mica-vermiculites, extinction bend contours in EM, 73-40; transformation of sericite to, 73-107; vermiculite-phlogopite formation in alpine environment, 73-206; *England*, mica-montmorillonite K-bentonite beds, 73-1237; *Iceland*, formation in geothermal area, 73-1005; *Israel*, illite-smectite, 73-190; *Japan*, chlorite-montmorillonite from green tuff, 73-191; *Mexico*, kaolinite-montmorillonite, 73-188; *Poland*, kaolinite-smectite, 73-189; *Taiwan*, sericite-montmorillonite, 73-1249; *Washington*, vermiculite-phlogopite formation in alpine environment, 73-206
- Miyagi v. Japan
- Miyanohera, *Tokyo v. Japan*
- Miyazaki v. Japan
- Moji, *Fukuoka v. Japan*
- Mogilata, *Madan v. Bulgaria*
- Mohelno v. *Czechoslovakia*
- Mohand Agency v. *Pakistan*
- Moissanite, *Uzbek SSR*, in sedimentary formation, phys., X-ray data, 73-1865
- Mojave Desert, *California v. USA*
- Moldanubicum v. *Czechoslovakia*
- Moldavites, book, 73-1207
- Molecular crystals, phys. chem., structural & biological aspects, 73-1277
- Molodezhnaya Station, *Enderby Land v. Antarctica*
- Molybdates, ABO_4 , accurate cell dimensions, 73-241
- Molybdenite, *Bohemia*, Re & Se contents, 73-762; *Michigan*, 73-1102
- Molybdenite-tungstenite series, *Austria*, inclusions in scheelite, 73-4062
- Molybdenum, colorimetric determination by zinc dithiol, 73-3334; coprecipitation with SiO_2 from H_2S solutions, 73-2569; determination in materials from processing Witwatersrand U ores, 73-1163
- New Mexico*, resources, 73-3587; *Swiss Alps*, distribution in various rocks, 73-3531
- , compounds, $\text{MoO}_3 \cdot 2\text{H}_2\text{O}$, crystal structure, 73-1322; trisulphide, natural occurrence, 73-812
- , deposits, porphyry-Cu-, geol. characteristics, statistical study, 73-3512; *British Columbia*, age, 73-2228; *N. America*, stockwork, 73-3574; *Russian SFSR*, boundaries of mineralization, 73-267
- Molybdomenite, crystal structure, 73-239
- Monazite, determination of Pb, 73-1165; visible & near-IR spectra, 73-1066
- Brittany*, nodules with high Eu_2O_3 , 73-3629; *California*, RE source in orebody, 73-3655; *Czechoslovakia*, in stream sediment, 73-1903; *Italy*, in sediments, provenance, 73-4108; *Romania*, chem. anal., 73-661; *S. Carolina*, fluvial deposits, 73-2533, 2534
- Monetite, *California*, in diatomite beds, 73-4068
- Mongbwala v. *Zaire*
- MONGOLIA, zwittler, Sn-ore metasomatism, geochem., 73-2499; *Höbso Göl*, phosphatite basin, geol., 73-2532
- Mono Lake, *California v. USA*
- Monohydrocalcite, in speleothems, biochemical genesis, 73-478; thermochemical study, 73-3718
- Monsal Dale, *Derbyshire v. England*
- Montagne Noire, *Hérault v. France*
- Montagne Noire, Massif Central v. *France*
- Montana v. USA
- Mont Dore, *Puy-de-Dôme v. France*
- M. Prentini v. *Italy*
- M. Peloritani, *Sicily v. Italy*
- Monte Rosa v. *Alps*
- M. Vulture, *Lucania v. Italy*
- Montebasite, *S. Dakota*, 73-2538
- Montebasite-ambygonite minerals, F content, phys. properties, 73-4071
- Montemerano, *Apennines v. Italy*
- Montenegro, *Aconcagua v. Chile*
- Montferrand, *Puy-de-Dôme v. France*

- Monticellite, solid solution with forsterite, 73-3724
- Montmorillonite v. smectites
- Montpellier, *Hérault* v. *France*
- Montreal I., *Quebec* v. *Canada*
- Monteron, *Arige* v. *France*
- Monturaqui v. *Chile*
- Monviso Massif, *Cottian Alps* v. *Italy*
- Monywa v. *Burma*
- Monzonite, *Japan*, age, 73-21
- MOON, arguments for hot moon, 73-612; core of Fe-Ni-S, 73-2781; dumbbell-shaped globules, rotation during formation, 73-1772; dynamic props, internal structure, 73-1071; electrical conductivity profile, 73-617; extralunar dust in Apollo cores, 73-615; geology, from Ranger photographs, 73-1758; mascons & isostasy, 73-2782; metallic particle, interpretation, 73-614; model with offset core, 73-2780; origin, 73-611; petrol. model, 73-1743; selenography with Apollo photos, 73-623; spherical astronomy for phys. observations, 73-3878; winding furrows on surface, 73-620; *Descartes highlands*, geol., 73-2758; *Flamsteed K region*, geological map, 73-621; *Fra Mauro formation*, petrol., stratig., 73-610; *Macrobis quadrangle*, geol. map, 73-2787; *Ocean of Storms*, age, 73-3921; *Oceanus Procellarum*, geol. map, 73-1759; *Taurus-Littrow region*, geol. maps, 73-2786; also v. lunar rocks, etc.
- Moravia v. *Czechoslovakia*
- Morbihan v. *France*
- Mordenite, siliceous, synthesis, 73-445; *Mexico*, first occurrence in sedimentary rocks, 73-4297; *Montana*, locality, 73-1103
- Morgantown, *Virginia* v. *USA*
- Morkoka R., *Russian SFSR* v. *USSR*
- Morlaix, *Finistère* v. *France*
- MOROCCO, new min., irhtemite from Co-Ni deposits, 73-1937; *continental margin*, CO₂ substitution in carbonate-apatite, 73-1926; *Mibladen mine*, vanadinite specimen in Sorbonne collection, 73-3266
- Morton, *Minnesota* v. *USA*
- Moschellandsbergite, magnified photographs of crystals, 73-1203
- Mössbauer spectra, aegerine-augite, arfvedsonite, 73-226; of various natural minerals, 73-212; pyroxenes in system MgSiO₃-Fe₂O₃, 73-223; 'statistical best fits', 73-2374
- spectroscopy, high-*P*, in mantle mineralogy, 73-3319
- studies, biotite, 73-1304; ferriphlogopite, 73-2378; of Apollo 12 samples, 73-3899, 3901; tripleite & related mins., 73-1339
- Mounana v. *Gabon*
- Mt. Dromedary, *N.S.W.* v. *Australia*
- Mt. Etna, *Sicily* v. *Italy*
- Mt. Girnar, *Gujarat* v. *India*
- Mt. Hamilton, *California* v. *USA*
- Mt. Hunt, *W. Australia* v. *Australia*
- Mt. Insel, *Victoria Valley* v. *Antarctica*
- Mt. Isa, *Queensland* v. *Australia*
- Mt. Johnson, *Quebec* v. *Canada*
- Mt. Jolmo Lungma v. *Tibet*
- Mt. Lyell, *Tasmania* v. *Australia*
- Mt. Manypeaks, *Albany*, *W. Australia* v. *Australia*
- Mt. Monger, *W. Australia* v. *Australia*
- Mt. Morgan, *Queensland* v. *Australia*
- Mt. Olympus v. *Greece*
- Mt. Pélago, *Alpi Marittime* v. *Italy*
- Mt. St. Helens, *Washington* v. *USA*
- Mt. St. Hilaire, *Quebec* v. *Canada*
- Mt. Samson, *Queensland* v. *Australia*
- Mt. Surprise, *Queensland* v. *Australia*
- Mt. Taftan, *Baluchistan* v. *Iran*
- Mt. Tom Price, *W. Australia* v. *Australia*
- Mt. Whaleback, *W. Australia* v. *Australia*
- Mt. Zeda, *Novara* v. *Italy*
- Mountain Pass, *California* v. *USA*
- Moxie, *Piscataquis County, Maine* v. *USA*
- Moyenmoutier massif, *Vosges* v. *France*
- MOZAMBIQUE, *South & Central*, volcanic & subvolcanic geol., 73-1989
- Mudgee, *N.S.W.* v. *Australia*
- Mudstone, *Staffordshire*, landslip investigations, 73-1270
- Mugearite, Ca diffusion in melt, 73-2571
- Muirite, 8-membered cyclosilicate rings in, 73-222
- Mull, *Argyll* v. *Scotland*
- Mullach nan Coirean, *Inverness* v. *Scotland*
- Mullet Peninsula, *Mayo* v. *Ireland*
- Mullite, conversion from kaolinite, 73-403; corrosion in sodium silicate melts, 73-404; formation from kaolin & Al(OH)₃, 73-405; kinetics of growth from kaolinite mins., 73-429; synthetic production, 73-3633; thermal conversion from kyanite, 73-1586
- Mundwara, *Rajasthan* v. *India*
- Murdochite, discussion of formula, 73-748
- Murihuku v. *New Zealand*
- Murra El Evelyn Cave, *W. Australia* v. *Australia*
- Musa Mena, *Malakand* v. *Pakistan*
- Musakhel v. *Pakistan*
- Muscovite v. mica
- Myinmu v. *Burma*
- Mylonites, classification, 73-4326; deep-seated, metamorphic study, 73-2133
- Myrmekites, *India*, evolution, 73-715, from charnockitic rocks, 73-1048, 2860; *Scotland*, of exsolution & replacement origins, 73-716
- Mysore v. *India*
- Nabaralek, *Northern Territory* v. *Australia*
- Nacrite, crystal structure, 73-2383; ditrigonal rotation of tetrahedra, 73-2376
- Nagano v. *Japan*
- Nagasaki v. *Japan*
- Nagatare, *Fukuoka* v. *Japan*
- Nagybörzsöny v. *Hungary*
- Naica, *Chihuahua* v. *Mexico*
- Nalžovské Hory, *Bohemia* v. *Czechoslovakia*
- Namibia v. *South West Africa*
- Namur v. *Belgium*
- Naretha, *W. Australia* v. *Australia*
- Narragansett Bay, *Rhode I.* v. *USA*
- Natal v. *South Africa*
- Natroalunite, *Texas*, chem. anal., 73-4076
- Natrophilite, crystal structure, 73-1340
- Natrophosphate, new mineral, 73-808
- Natural gas, correlation between N & He, 73-1731; extinct radioactive nuclides & production of Xe isotopes in, 73-1732; *USSR*, from deep drillhole, anal., 73-1734
- Naumannite, *Norway*, phys., chem., opt. data, 73-1893
- Needle Point, *Oregon* v. *USA*
- Neesite Range, *Utah* v. *USA*
- Negev v. *Israel*
- Nellore, *Andhra Pradesh* v. *India*
- Nelson, *B.C.* v. *Canada*
- Nelson v. *New Zealand*
- Nemuro, *Hokkaido* v. *Japan*
- Neouville massif, *Hautes-Pyrénées* v. *France*
- Nepheline, crystal structure, 73-2392, 2393; domain structure, 73-3475; intergrowths with K-feldspar in larvikite, 73-717; -kalsilite exsolution study, 73-439; Na-partitioning with clinopyroxene, 73-3674; rare elems. in, variation in alkalic rocks, 73-4030; transformation behaviour, 73-230; trinepheline, new synthetic modification, 73-3749; -type solid solution in CaO-Al₂O₃-SiO₂ system, 73-440, 441; *New Jersey*, confirmed in syenite, 73-917; *Ontario*, cation disorder, nuclear magnetic resonance of ²³Na, ²⁷Al, ²⁹Si, 73-1312, in ijolite, composition, 73-2868; *Russian SFSR*, secondary alteration of inclusions in, 73-724
- Nepheline syenite, *Greenland*, alkali clinopyroxenes in, 73-671
- Nephrite v. pyroxene
- Nevada v. *USA*
- New Brunswick v. *Canada*
- Newfoundland v. *Canada*
- Neptunite, *California*, chem., phys., opt., structural properties, 73-659
- Nesquehonite, heat capacity at low *T* & entropies, 73-3668; in speleothems, biochemical genesis, 73-478
- "Neotantalite", microlite, metamict study, 73-2887
- NETHERLANDS, Lower Permian rocks, 73-978; *Maastricht*, heavy mins. in sediments, 73-3113
- Neutron activation analysis, system for data reduction, 73-1184
- — —, determination, Au in phosphates, 73-1185; Cd, Hg, Tl & Bi in terrestrial rocks, 73-77; Hg, 73-71; in geochem. exploration, 73-2308; K, 73-3355; O in rocks, 73-3353; Pt & Pd, 73-78; Sr & Ba in rocks & sediments, 73-75; 32 elements in rocks, 73-76; 39 elements in small or precious samples, 73-70; tr. elems. in ruby laser crystals, 73-72; V in silicate rocks, 73-74
- New Caledonia v. *Pacific Ocean*
- New Calumet, *Quebec* v. *Canada*
- New England v. *USA*
- New England batholith, *N.S.W.* v. *Australia*
- New Georgia v. *Pacific Ocean*
- New Guinea v. *Papua & New Guinea*
- New Hampshire v. *USA*
- New Jersey v. *USA*
- New journals & series, *Geochimie*, geochemical methods & data, 73-474; *Geophysical Surveys*, 73-2026; *GUA Papers of Geology*, 73-2132; *Journal of Research, U.S.G.S.*, 73-1160; *X-ray Spectrometry*, 73-1176
- New Mexico v. *USA*
- New minerals, list of names, 73-1932; names, *Mac* vs. *Mc*, 73-1933
- — —, aktashite, 73-2938; balkanite, 73-2939; bideauxite, 73-1935; brannockite, 73-4078; brunogeierite, 73-805; cavanisite, 73-4079, 4080; cuprosinel, 73-2941; galkhaite, 73-1936; grimselite, 73-806; heyite, 73-2943, 2944; ilmaiokite, 73-807; irhtemite, 73-1937; kanemite, 73-1938; khuniite, 73-1939; krutaite, 73-2945; larosite, 73-3556; mertieite, 73-2946; meta-lodevite, 73-1940; molybdenum trisulphide, natural, 73-812; natrophosphate, 73-808; osarsite, 73-809; paraschacherite, 73-1941; pellyite, 73-2947; pentagonite, 73-4079, 4080; raite, 73-4081; santanaitite, 73-2948; schacherite, 73-1941; shadlunite, 73-4082; silhyndrite, 73-810; Te-bearing canfieldite, 73-1942; tetrawickmanite, 73-2949; tochilinite, 73-1943; zircophyllite, 73-2951; zorite, 73-4081; Bi mins., 73-1946; Bi-sulphides of Ag, Pb & Cu, 73-1945; hexagonal Cu₁₋₃₃S, 73-4084; Cu-Sn alloy (η'-Cu₃Sn₂), 73-811; (Cu, Zn)₂(OH)₂Cl, possibly named anakite, 73-1934; (Fe, Ni)₃S₁₁, 73-4083;

New minerals, aktashite, (contd.)

lunar, phase X, phase Y, 73-2950; Pb, As, Sb, 73-2906; (Pt, Pd)₂Sn₂, (Pd, Pt)₂(Sn, Pb)₂, 73-1944

New South Wales v. Australia

New York v. U.S.A.

NEW ZEALAND, coals, reflectance measurements, 73-2171; K, Ar, Rb, Sr & zircon ages, list, 73-1134; Li content in rocks, 73-1625; radiocarbon age measurements list, 73-1135; south, progressive metamorphism of metabasic rocks, 73-2145; Auckland, ultramafic nodules, petrofabric studies, 73-2035; Broadlands geothermal field, mineralization, 73-1447, min. & related geochem. 73-2660, tescemacherite in geothermal well, 73-1921, thermal waters, isotopic composition, 73-1715; Coppermine l., geol., mineralization, 73-1449; Coromandel County, Paritit, hornfels, chem. anat., 73-3153, non-metamict allanite in, 73-1803; Dunedin volcano, RE elems., 73-3796; Haast schists, myrmekites, 73-4027; Kaipara Harbour, diagenesis of spherulitic carbonate concretions, 73-4265, Pakaurangi Point, sedimentology of Waitemata Group, 73-3128; Kakani, eclogite inclusions, geochem., petrogenesis, 73-1671; Karikari peninsula, dumortierite, first record, 73-3992; Maratoto Valley, agulgarite, 73-767; Murihiku, heulandites & clinoptilolites from tufts, chem., opt., thermal stability, 73-1860; Nelson, Graham Valley, Ni-Cu sulphide mineralization, geol., 73-1997; Northland, K. Ar age of volcanics, 73-1133; Orakei-korako, geol., hot springs, 73-2726; Otago, ilherzolite nodules in "mafic phonolite", 73-3075; Otago, sandstones with authigenic pumpellyite, 73-2103; Otago & Westland, lamprophyre dykes, K, Ar ages, 73-1132; Riwaka, comparison of geochem. & biogeochem. data, 73-3867; South I., scheelites, anal., 73-4064; Tarawera, volcanic complex, petrog. of basic rocks, 73-2059, rhyolites, 73-2060, structure & eruptive history, 73-2057; Taupo volcanic zone, Au-Ag ore-grade precipitates from thermal waters, 73-1448, high alumina basalts, 73-4214, Haroharo, P_{total} P_{H₂O} & cummingtonite in volcanic rocks, 73-4203; Te Aroha, Tui mine, structural control of sulphide mineralization, 73-1450; Wairere, xenolith, rodingites from altered gabbro, 73-4005; Waitaki valley, Aviemore, axinite, origin, opt. properties, 73-1808; White l., volcanic activity, 73-2060, 2061

Newberryite, California, in diatomite beds, 73-4068; Sarawak, in cave guano, 73-890

Newport, Oregon v. USA

Newquay, Cornwall v. England

Niakornat v. Greenland

Niccolite, colour related to quality of polished surface, 73-2898; Bushveld complex, 73-756; Ontario, anal., 73-3554; Spain, chem. anal., 73-770

Nickel, exploration by neutron capture gamma rays, 73-1186; in Fe meteorites, XRF, 73-2283; polarographic determination in Fe meteorites, 73-81; India, extraction from laterites, 73-1433; Iraq, showing oil migration, 73-1727; Yugoslavia, in sedimentary Fe ore, 73-258

— deposits, Canada, Archaean, classification, geol., genesis, 73-281; Egypt, geol., 73-3596; New Brunswick, 73-3567; Russian SFSR, zoning, 73-268; Ukraine, petrol., 73-2498

— mineralization, W. Australia, petrol. of associated serpentinous rocks, 73-497

Nickel-hexahydride, Tasmania, indexed X-ray powder data, 73-4073

Niemcza v. Poland

NIGERIA, age of metamorphic basement, 73-2203; bauchite, petrog., chem., min., 73-872; Ganawari overthrust, correction, 73-2471; younger granites, genesis, experimental studies, 73-3678; north-east, age of volcanics, 73-11; Dadin Kowa basalts, origin of feldspar megacrysts in basalts, 73-871, 3034; Dorowa-Babuje, kaolinite greisen, 73-1420; Werran Hills, Pliocene tholeiite, 73-3091

Nigeria, Spain, new occurrence, 73-2813

Nihor, Moravia v. Czechoslovakia

Niigata v. Japan

Niobium, in alkaline rocks, isotope-excited XRF, 73-1180; migration patterns in supergene subsurface water, 73-1719; XRF spectrometry determination, 73-3348; Central Asia, in granites & clays, 73-1665; Quebec, in silico-carbonate sill, 73-507

Nitrogen, in Apollo 12 samples, 73-3907; reduction of oxides, RE-manganites as catalysts, 73-3702

Noble gases, Israel, in ground-waters, palaeo temperatures, 73-2738

Noble metals, determination by AAS in presence of Na, Ba or SO₄ ions, 73-3331; in matte-leach residues, separation & determination, 73-2273; methods of separation & determination, 73-1191

Noddy's Creek, Tasmania v. Australia

Non-dispersive laboratory analyser, 73-2287

Nontronite r. smectites

Noonaera, W. Australia v. Australia

Noqui v. Zaïre

Noranda, Quebec v. Canada

Nordfjord v. Norway

Nordland v. Norway

Nordmarka v. Norway

Nordstrandite, New South Wales, in coal measures, 73-1920

Norfolk v. England

Noril'sk, Russian SFSR v. USSR

Norites, India, in granulitic gneisses, modal, chem. anal., 73-933, 934

Norseman, W. Australia v. Australia

NORTH AMERICA, Appalachian strata-bound deposits, features, genesis, 73-1387; bibliography of asphalt-bearing rocks, 73-301; Pb isotopes in coals, 73-547; provenance studies of tills, 73-4273; western Cordillera, stockwork Mo deposits, 73-3574; Lake Huron, Hg distribution in sediments 73-3819, Lake Huron, surficial sediments, 73-4272

North Bay, Ontario v. Canada

North Carolina v. USA

North Dakota v. USA

North Esk Reservoir, Midlothian v. Scotland

North Little Rock, Arkansas v. USA

North West Frontier Province v. Pakistan

Northland v. New Zealand

Northumberland v. England

Northupite, Uganda, primary, in lake sediment, 73-2925

NORWAY, age of volcanic ash units in peat bogs, 73-2193; hollow apatites in layered basic intrusion, 73-2929; north, gravity surveys, 73-4135; south, chem. of gabbro/amphibolite transitions, 73-2721, pelitic rocks, geochem., min., 73-4322, Sn contents in Nb-Ta mins., 73-3765, ultramafic intrusion in core zone of Caledonoids, 73-823; Arendal, palaeomagnetism of dyke systems, 73-2165; Bamble, Sveconor-

wegian regeneration & earlier orogenic events, 73-2112, Tråk, Pb, Zn-bearing veins, fluid inclusion studies, 73-1412; Bjerkem-Sogndal massif, anorthositic xenoliths, provenance, 73-3799, pyroxene & olivines in anorthositic-mangerite series, 73-673; Bleikrassli, chem. influence of folding styles, 73-1411; Bygland, anatectic granite, 73-4323; Fen complex, gravit studies, petrol. significance, 73-291; ilherzolite nodules, 73-3062; Finnmark, opaque oxides in igneous complex, 1906; Finnmark S.W. & N. Troms, mafic & ultramafic intrusions, petrol., 73-4134; Finnmark, Seiland, syenite-carbonatite relations, 73-2020, plutonic history, 73-4133; Sorøy, emplacement of plutonic igneous rocks, 73-2019; Hareidland, clinopyroxenes in eclogite, 73-669, eclogite in high-grade metamorphic gneisses, petrogenesis, 73-1037, Ti-rich secondary biotite in eclogite, 73-694; Kongsberg, aegirite mins. from Ag deposit, 73-1824, naumanite, 73-1893, Rb-Sr geochronology, 73-1893, Ca-rich gadolinite, 73-651; Kristiansund, age of metamorphism, 73-1115, convergent metamorphism of eclogites & dolerites, 73-4320, petrol. of high-grade metamorphics, 73-4321; Kviken, geol. of mines, 73-250; Lake Storsjön, sedimentary Fe ore pisolith, chem., 73-1656; Langesundsfjorden, braid perthite in nepheline syenite pegmatite, 73-1842; Lappland, cordierite-calcite-pyrite formation in granulite rocks, 73-2108; Larvik, Tvedalen, first Norwegian occurrence of wickmanite, leadhillite, hydrocerussite, 73-1083; Lofoten Is., Austvågøy, dolerite dykes, geochem., metamorphism, 73-3844; Nordfjord, Almeningen, zone, garnet in eclogite, 73-652; Nordland, basal granitic gneisses, structure, geochronology, 73-3272, Nordland, fluorescent hydrogrossular, 73-1796; Nordmarka, Lake Gjerdingen, gravity studies on larvikite massif, 73-1968; Numedal, Quaternary clays, min., geochem., 73-3427; Risør area, polyphase metamorphism in granulite facies, 73-1044; Snarum, white crystalline magnesite in serpentine, 73-788; Sogn, red muscovite in gneiss, 73-1828; Sorfinnset, multiple folding, 73-2109; Sor-Trøndelag, Rodhammeren mine, sulphide mineralization, 73-1410; Sorøy, Storelv gabbro, timing & environment of emplacement, 73-1950; South Rogaland, microtextures of Fe-Ti oxides in anorthositic complex, 73-4044; Spitzbergen, OSCA II Land, glaucophane schists, min., XRF anal., K/Ar ages, 73-1041; Stacanger, Rb/Sr isochron date, 73-3273; Stjernøy syn-orogenic dyke swarm, 73-2107; Sultung, elma gabbro, chem., structure, 73-4136; Telemark, Precambrian rocks, zircon studies, 73-2110, wittichenite in hydrothermal quartz veins, 73-1888; Troms, Lyngen peninsula, geol., 73-4131, igneous rocks, 73-4132; Trøndelag, chloritoid occurrence, 73-2175, Beitstad fjorden, Jurassic sideritic ironstone, 73-970, Leka mafic & ultramafic rocks, petrol., 73-1967; Trondheim, contact metamorphism associated with gabbros, 73-2111; Vallesvæ granite, petrog., major elem. relations, 73-854; Vestfold, Kodal, ilmenomagnesite-apatite deposit, 73-2492, jacupirangite dyke, modal anal., ore potential, 73-3590

Notre Dame Bay, Newfoundland v. Canada; Nottinghamshire v. England

- Nova Scotia v. Canada*
Nováky v. Czechoslovakia
Novara v. Italy
Nushera Tehsil, N.W.F.P. v. Pakistan
Nufenen Pass v. Switzerland
Nulagine, W. Australia v. Australia
Nurmedal v. Norway
Nyamutito mine v. Uganda
Nye County, Nevada v. USA
Nyiragongo lava lake v. Zaire
- Oahu, Hawaii v. USA*
Oaxaca v. Mexico
Oberalpstein, Grisons v. Switzerland
Oberschel, Pfalz v. Germany
 Obsidian, hydration dating applied to basaltic activity, 73-30; peralkaline oversaturated, chem., 73-3805; review of inclusions, 73-4168; *Arizona, California, Oregon, Wyoming*, localities, 73-2006; *Mexico*, sources & trade, tr. elem. anal., 73-572; *Wyoming*, hydration rinds, 73-4217
Oceanite, India, dykes, petrol., chem. anal., 73-3070
Oceans, growth & O isotope evolution, 73-556
Odd West, Manitoba v. Canada
Odenwald v. Germany
Officer Basin, W. Australia v. Australia
Ogoué delta, Gulf of Guinea v. Atlantic Ocean
Ohio v. USA
Oli mining district, Utah v. USA
 Oil, origin, 73-2734; *India*, trace metals in, 73-559; *Iraq*, vertical migration, 73-1727
Okla, Quebec v. Canada
Okanagan Valley, B.C. v. Canada
Onite, Germany, metasomatic product, 73-1006; *Utah*, occurrence, IR anal., 73-4035; *Virginia*, 73-1095
Okhotsk pluton, Russian SFSSR v. USSR
Okhotsk, Russian SFSSR v. USSR
Okid-Dogo I. v. Japan
Okiloma v. USA
Oldrychowice, Lower Silesia v. Poland
 Oleates, IR studies of adsorption on min. surfaces, 73-1190
Oligoclase v. feldspar
 Olivine, & coexisting orthopyroxene, distribution of Mg & Fe between, in eulysites, 73-2798; chem. relation with parent volcanic rocks, 73-647; composition in kimberlite, 73-4175; distribution of Fe & Ni between sulphide & 73-3725; fission track annealing, 73-341; in lunar rocks, accumulated, 73-3895; in shoshonitic association, chem., 73-672; lunar, compositional characteristics from Apollo 12 samples, 73-580; Mg-Fe-Mn, cation determinative curves, 73-646; minor element distrib. in, 73-1782; Mössbauer spectra, 73-212; paragenetic types, chem., 73-1780; petrofabric orientation, 73-4177; phenocrysts, chem. equilibrium with basaltic host melts, 73-3726; polarized spectra of ferrous iron, 73-3453; revelation of tracks of charged particles, 73-629; seismic wave velocities in aggregates, 73-3217; soft X-ray study, 73-1783; -spinel transformation, pressure dependence, 73-1501; standard free energy of formation, 73-311; structures of solid solution decomposition in, from ultrabasic rocks, 73-1779; variations of Si-O distances, 73-2361; *Atlantic Ocean*, origin of nodules in basaltic rocks, 73-485; *India*, in chromite-bearing ultramafites, 73-3978; *Montana*, grain-size variations within a cumulate, 73-918; *Norway*, in anorthosite-mangerite series, 73-673; *Tanzania*, relation with pyroxene in rocks, 73-3979; *W. Australia*, metamorphic, in ultramafic rocks, 73-1781
 —, fayalite, composition and standard free energy of formation, 73-395
 —, forsterite, application of *P-T* curve for hydration to dunite, 73-1522; crystal growth, 73-1579; inclusions in diamond, 73-3068; piezo-optic behaviour, 73-2606; forsterite, solid solution with monticellite, 73-3724, forsterite, thermal conductivity at high *T*, 73-3211
 —, knebelite, *Quebec*, Fe from nordmarkite, 73-2799
Olksuz v. Poland
Omi-Kotaki, Niigata v. Japan
 Omphacite v. pyroxene
Ongole, Andhra Pradesh v. India
Onikobe, Miyagi v. Japan
Ontario v. Canada
 Opal, dehydration, 73-3373; dissolution in H₂O, & H₂O content, 73-1854; precipitation by marine gastropods, 73-525; subtranslucent doublet, 73-2642; *Idaho*, in silicified Sequoia tree, 73-458, mining, 73-455; *Mexico*, 73-2184; *New South Wales*, inclusions in, 73-2636, irregular nodules, 73-2637; *USA*, in neritic bar sand, 37-2866
 Opaque minerals, change of colour with quality of polished surface, 73-2898; *Mexico*, in volcanic rocks, min., 73-3055
 Ophiolites, *Italy*, structural features, 73-4188; *Newfoundland*, complex, 73-1947
 Optic axial angle, calculation of 2V, 73-3302
Orakeikorako v. New Zealand
 Ore deposits, alluvial, quantitative min. evaluation, 73-2453; & associated rocks, experimental review, 73-3509; & geological complexity, 73-1354; Appalachian strata-bound, features, genesis, 73-1387; coefficient of variation in sampling, 73-244; crust or mantle origin, 73-1341; detection by remote-sensing effects of metals on vegetation, 73-84; in sediments, congress, 73-2299; magmatic, in ultramafic & gabbroic rocks, 73-246; mechanical action, thermal gradient in formation of, 73-3508; *S. Africa*, relation with differentiated ultramafic bodies, 73-3523; *USA*, 38th parallel, relation to wrench fault, 73-3573
 — extraction, segregation process, 73-3686
 — dressing, recovery & re-use of water in, 73-557
 — fabrics, *Austria*, in scheelite deposits, 73-255
 — formation, role of metamorphism, 73-1346, 1347; *India*, significance of geochem. trends during migmatization, 73-490
 — forming solutions, *Colorado*, flow rate, 73-1633
 — minerals, electrical conductivity, 73-1064
 — petrology, book, 73-3367
 Ores, & metals, book, 73-1211; associated with basic intrusives, textural relations, 73-1345; base-metal, fusion method for XRF, 73-1178
Oregon v. USA
 Organic acids, in chem. weathering of silicates, 73-3688
 — chemicals in the soil environment, book, 73-1201
 — compounds, derivation of isoprenoid-type acids in lacustrine environment, 73-3837; formation on primitive Earth, 73-1622; hydrophobic, retention of humic acid, 73-532; in Holocene sediments, 73-543; in Murchison meteorite, 73-3968; polluting river-water, 73-1713; synthesis in simulated jovian atmosphere, 73-345; *Siberia*, bitumens in kimberlite, 73-520
 — matter, in Archaean rocks, 73-537; in Shales, effect of weathering on, 73-2708; *Dead Sea*, in sediments, 73-533; *S.W. Africa*, microspheres in Precambrian, 73-1688
Orieo Mine, Tasmania v. Australia
Orissa v. India
 Orogenic cycles, early clastic formations, 73-4098
 Orpiment, *Chile*, opt. props., EM anal., 73-2901; *Iran*, in Sorbonne collection, 73-3266; *Japan*, in hot spring deposits, 73-549; *Nevada*, Sb-bearing, chem. anal., 73-1884
 Orthogonal minerals, calculation of microhardness values, 73-2903
 Orthopyroxene v. pyroxene
 Orthosilicic acid, & L_{2,3} X-ray spectra, 73-219
 Osarsite, new mineral, 73-809
Oscar II Land, Spitzbergen v. Norway
 Osmium, determination in residues from leaching of mattes, 73-53; in lunar rocks, 73-3908
Osoreyama, Akita v. Japan
Osstalpen v. Austria
Ostrava v. Czechoslovakia
Osuni v. Japan
 Osumilite, *Ireland*, optical, EM anal., 73-3996
Otago v. New Zealand
Ottawa, Ontario v. Canada
 Ottrelite v. chloritoid
Ottal v. Austria
Ouro Preto, Minas Gerais v. Brazil
Owyhee Dam, Oregon v. USA
 Oxides, crystal chem. of tetrahedrally-coordinated, 73-96; defects in, 73-96; high-*T*, characterization of order-disorder by IR & Raman spectroscopy, 73-96; in lithic fragments from lunar fines, 73-2769; synthetic, Fe-Al substitutions in, 73-1549; synthesis of pure, 73-3665; Ti & Ti-Cr oxide systems & swinging shear planes, 73-96; Zn, formation of dislocations in crystals, 73-321
 Oxidic material, mechanized sample preparation for XRF, 73-2291
 Oxygen, determination in rocks by fast NAA, 73-3353; fugacity in kimberlite, 73-4175
 — isotopes, evolution & growth of the oceans, 73-556; exchange between quartz & H₂O, 73-555; geochem. of submarine greenstones, 73-2718; in eclogites from kimberlites, 73-519; in fresh & weathered sub-marine basalts, 73-2719; in geothermometry of Proterozoic & Archaean granulites, 73-539; in lunar soil, 73-2777; in mins. from porphyry Cu deposits, 73-1649; lunar samples 73-3909, 3911; systematics in weathering profiles, 73-2716; thermometry of mafic igneous rocks, 73-3789; *Arkansas*, carbonatite, 73-1676; *Czechoslovakia*, in dolomite & calcite, 73-1691; *Germany*, in dolomite & calcite, 73-1690; *India*, in limestone, 73-540; *Italy*, in Lepontine gneiss mins., 73-540; *Japan*, study of cretaceous granitic rocks, 73-1663; *New Zealand*, thermal waters, 73-1716; *Quebec*, carbonatite, 73-1676
Oze, Gunma v. Japan
Paarup v. Denmark

Pabstite, *California*, 73-4372
Pacific Basin, Fe ore deposits, genesis, 73-3582
 PACIFIC OCEAN, pyrite globules in pelagic ooze, 73-2894; *central & west*, volcanic rocks from deep sea drill, 73-2995; *central Pacific Basin*, sediments, chem. & min. studies, 73-2994; *west*, carbonate sedimentary rocks from deep sea cores, 73-2991, *west* cherts, origin, 73-2993, deep sea drilling, geochem., min., palaeontol., 73-2989, deep sea turbidites, 73-2992, volcanic rocks from deep sea cores, 73-2990; *California-Hawaii*, amorphous Fe oxide precipitates in sediments, 73-2987; glassy objects in deep sea clays, 73-2986, min. of turbidite sands, 73-2985, volcanic ash & pumice, basalt, modal anal., 73-2988; *Cascadia Basin*, clay min. composition of Late Pleistocene & Holocene sediments, 73-1253; *Cascadia Channel*, deep-sea gravel, petrog., 73-2092; *Chile & East Pacific Rises*, basalts, Sr isotopes, 73-1674; *Eniwetok Atoll*, C & O isotopes in marine carbonate sediments, 73-3829; *Fiji*; *Emperor mine*, vertical zoning of Au-Ag tellurides, 73-3615, *Viti Levu*, geol., 73-2062; *Marquesas Is.*, *Ua Pu*, basalt-trachyte-phonolite series, 73-4172; *New Caledonia*, distribution of Cu-Ni sulphides & oxides in layered ultrabasic mass, 73-902, K/Ar age of basalts, 73-1137, *Ouégoa*, amphiboles, electron-probe anal., 73-2835, garnets in metamorphics, composition, 73-2804; *New Georgia*, basaltic rocks, crystal fractionation model, 73-2036, *New Georgia*, volcanic & associated rocks, 73-3093; *Phoenix Is.*, *Enderbury I.*, chem. composition of saline lake, 73-1715; *Tonga & Kermadec Is.*, volcanics, Pb isotopes in, 73-2063
 — — & ASIA, K distribution patterns in post-Jurassic granitoids, 73-2981
Pahitvaara v. Finland
Pailin v. Cambodia
Pakaurangi Point, Kaipara v. New Zealand
Pecoraite, W. Australia, electron-probe data, 73-2921
Pectolite, Japan, associated with jadeite, 73-1814
 PAKISTAN, beneficiation of sand for glass-making, 73-3642, 3643; DTA studies of indigenous mins., 73-3639; min. anal., circular thin-layer chromatography, 73-3341; study of analcite in soils, 73-3417; *north-west*, asbestos, min., 73-3637, geol. research, review, 73-2977, phosphatic mineralization as basis for stratigraphic correlation, 73-3125; *Attock-Cherat range*, geol., 73-2978; *Chagai, Saindak*, geol., Cu mineralization, 73-1378; *Dir, Jandul valley*, geol., 73-3037; *Ghundali Tarako*, dolomite, chem., 73-3644; *Hazara District*, feldspars, min. & ceramic properties, 73-3638, *Hazara, Gandghar range*, geol., 73-2979; *Hindubagh*, hydromagnesite, heat capacity at low *T* & entropies, 73-3668, nodular chromite, origin, 73-3538; *Jhelum, Karuli*, halotrichite, phys., chem. data, min., 73-4074; *Khewra*, Khussak formation, lithology, deposition, 73-3127; *Khyber Agency, Jamrud*, talc deposit, geol., 73-3640, *Tirah* hydrothermal graphite, 73-3539; *Kurram Agency*, asbestos, min., 73-3641; *Malakand, Musa Mena*, rodingite lenses, 73-4313; *Mansehra-Amb State area*, geol., 73-4116, petrol. of dolerites, 73-4150; *Mohmand Agency & Bajaur*, geol. traverse, 73-3038; *Musakhel*, high-alumina clay, physico-

ceramic properties, 73-3636, limestone, geochem., 73-3832; *N.W.F.P., Nowshera Tehsil, Misri Banda quartzite*, petrog., 73-3126; *Rawalpindi, Bagh*, clay deposits, min., 73-3428; *Salt Range*, bauxite & clay deposits, 73-2339; *Skesar Hills*, high-alumina clay, min., ceramic data, 73-3441; *Swat*, china clay, chem. properties, 73-3399, phys. properties, 73-3398, kaolinite, min., 73-3403; *Swat Kohistan*, geol., petrog., 73-3036; *Ziarat*, phase composition of laterites, 73-3603
 Palaeoaquifer symposium, 73-3576, 3577, 3578
 Palaeoclimatology, & stability of feldspars, 73-3840
 Palaeomagnetism, changes in pillow lavas due to weathering, 73-3220; *Africa*, Precambrian rocks, 73-2167; *British Columbia*, 73-1078, 1079; *Canada*, Frontenac axis, 73-3224, in tholeiites, 73-2999, Proterozoic sediments, 73-4357, *Baffin I.*, & revised Franklin pole, 73-4356, *N.W.T.*, diabases, 73-3223, 3225; *Finland*, intrusives, 73-2; *Labrador*, gabbro, 73-4355, igneous rocks, 73-3227; *Lake Superior*, Keweenaw rocks, 73-2166; *Mt. Etna*, 73-3084; *Mull*, regional dyke swarm, 73-3228; *Norway*, in dyke systems, 73-2165; *Ontario*, 73-1078
 Palaeosalinity, indicated by Cl content of clays, 73-2692; related to initial porosity of sediments, 73-4240; relationship with exchangeable cations, 73-2710
 Palaeotemperatures, Quaternary, 73-1624
 Palagonite, rate of formation from sideromelane, 73-2066
 Palagonite-chlorophaeite minerals, *Russian SFSR*, 73-1836
 Palladium, NAA determination, 73-78; *Montana*, variation in complex, 73-3784; *Russian SFSR*, new solid solutions, (Pt, Pd)₅ Sn₂, (Pd, Pt)₇ (Sn, Pb)₂, 73-1944
 Palmierite, crystal structure, 73-2363
 Palygorskite, & HCl treated-, IR study, 73-3375; clays for industrial markets, 73-3444; dehydration, 73-3373; detection in clay mineral mixtures, 73-98; *Norway*, in Ag deposit, 73-1824; *USA High Plains*, genesis, 73-180
Pambula, N.S.W. v. Australia
Pamirs, Tadzhik SSR v. USSR
Pamlico Sound, N. Carolina v. USA
Pampa Larga v. Chile
 PANAMA, latosol, effects of amorphous constituents on min. & chem. properties, 73-157; tectomagmatic & metallogenic relationships, 73-1405
Panasqueira v. Portugal
Panoche Pass, California v. USA
Paoa I., Mono Lake, California v. USA
 PAPUA NEW GUINEA, diagenetic alteration of clay mins. in Mesozoic shales, 73-200; K/Ar age of tertiary f₁₋₂ stage, 73-2209; tropical weathering, 73-3415; *Matupi Harbour*, volcanic exhalations & metal enrichments, 73-2656; *Rabaul caldera*, high-*T* pumice flows, 73-3092
Torres Strait, shoshonitic lavas, chem. anal., 73-907
 Parahopeite, *S. Australia*, 73-3502
Paraiba Basin v. Brazil
 Pararammelsbergite, *Ontario*, anal., 73-3554
 Para-schachnerite, *Germany*, new mineral, 73-1941
 Paragonite v. mica
 Pargasite v. amphibole
Paria Peninsula v. Venezuela

Parisite, California, RE source in orebody, 73-3655
Paritu, Coromandel County v. New Zealand
 Parkierite, crystal structure, 73-3484
Parma v. Italy
Paros v. Greece
 Particle size distribution, computation from sedimentation curves, 73-3310
 Pearceite, *Montana*, data, 73-772
Pecerady, Bohemia v. Czechoslovakia
 Pedogenesis, *Tchad*, in tropical regions, 73-2338; *W. Africa*, of red soils, 73-2337
Pedra Verde, Ceara v. Brazil
Pedrignano, Parma v. Italy
 Peel technique, acetate peels of carbonate rocks, 73-3309; acetate peels of etched agate slices, 73-1149; stained dry cellulose peels of carbonate sediments, 73-3308
 Pegmatites, chamber, *P* & *T* during formation, 73-318; secondary hypogene paragenesis, significance, 73-290; *Africa*, *R*, granitic, & related aplites quartz veins & min. deposits, 73-291; *Austria*, geochem. 73-1669; *Colorado*, paragenesis of topaz-bearing portion, 73-919; *Ghana*, spodumene-, geochem., 73-1816; *India*, formation *T*, 73-1482, segregation from dolerite dyke, with high calcic pigeonite, 73-670; *Manitoba*, description, 73-2038, geol. paragenesis, 73-3051, mins. in, 73-324; mineralogy, 73-1101; *Rhodesia*, Sn-bearing, geol., 73-3537; *Romania*, geothermometry, 73-1988; *Saskatchewan*, & associated gneiss, ages, 73-3294; *Siberia*, Ta-, Cs-bearing, new paragenetic type, 73-3025; *Texas*, min., 73-2004
 Pegmatoid, *Bushveld complex*, ultramafic origin, 73-877
 Pelitic rocks, stability of pyrophyllite-kaolinite in, 73-4229; *Norway*, geochem. min., 73-4322
 Pellyite, *Yukon*, new mineral, 73-2947
Pendower, Cornwall v. England
Pennines v. England
Pennsylvania v. USA
Pennobscot Bay, Maine v. USA
Pensacola Mts. v. Antarctica
 Pentagonite, *Oregon*, new min., 73-4074, 4080
 Pentlandite, *Bushveld Igneous complex*, 73-756; *India*, replacement phenomenon, 73-1875; *Montana*, & pyrrhotite, Fe (Fe + Ni) ratios, 73-4049; *Quebec*, assemblages in sulphide deposit, 73-1874; *Russian SFSR*, Ag-rich, 73-758
Peoria County, Illinois v. USA
Perch Lake, Chalk R., Ontario v. Canada
 Periclase, ionic effects in single-crystal, 73-1065; -spinel compositions, properties, 73-368
 Peridot, inclusions in 10-carat specimen, 73-454; valuation principles, 73-466
 Peridotites, origin of Archaean eugeosynclinal, 73-1023; SEM study of cracks & pores, 73-2170; spinel- & garnet-, equilibration *P* & *T* of various lava types with 73-354; *England*, primary igneous textures, 73-1978; *Europe*, & geotectonic implications, 73-2027; *India*, petrochem. of dyke & upper mantle composition, 73-834; *Wyoming*, origin, 73-2000
 Peridotite-gabbro complexes, distinction between stratiform, concentric & alpine, 73-813
 Peridotite, garnet-, sulphide mineralization in xenoliths in kimberlite, 73-2956;
 Periglacial processes & environments, book 73-3369
 Peristerite v. feldspar
Pernatty Lagoon, S. Australia v. Australia

- erthite v. feldspar
 erovskite, classification of tilted octahedra in, 73-2410; composition in kimberlite, 73-2886; ordered, electronic & vibrational spectra, 73-3479; *Italy*, specimens, 73-1085
 ERU, archaeological radiocarbon dates, 73-1135; coastal batholith, geol., 73-949; structural aspects, 73-950; *Cerro de Pasco*, luzonite, crystal structure, 73-3487; X-ray amorphous sulphide & crystalline inclusions, 73-2906; *Quebrada Venado Muerto*, contact metamorphism, structure, 73-2105; *Quirwilca*, sulphide paragenesis, 73-4061
 erylene, significance, 73-3815
 etalite, alteration in pegmatites, 73-290; *Brazil*, transparent, 73-461; *Manitoba*, & spodumene relations, in Tanco pegmatite, 73-2831
 eterborough, Ontario v. *Canada*
 etersburg, Virginia v. *USA*
 etrified peat, *N. Dakota*, first occurrence in *N. America*, 73-999
 etrified wood, *Mississippi*, 73-1098
 etroleum, & organic chemicals, book, 73-2312; genesis, 73-1510; *Utah*, resources, 73-2527
 etrology, experimental beginnings, 73-304; of the igneous rocks, book, 73-3360; of igneous and metamorphic rocks, book, 73-93; of ores, book, 73-3367
 etrov, Moravia v. *Czechoslovakia*
 etrovice v. *Czechoslovakia*
 etzite, *Fiji*, 73-3615
 falz v. *Germany*
 harmacosiderite, *Czechoslovakia*, in conglomerates, 73-1930
 base diagrams, interpretation, book, 73-1199
 base equilibria, graphical representation of sulphide-silica, 73-1492; in lunar rocks, 73-3892
 base relations, in geochemical processes involving aqueous solutions, 73-2558
 base transformations, general theory, 73-1276
 base transitions, explosive on geological scale, 73-821
 base X, phase Y, new lunar Zr-Fe-Ti oxides, 73-2950
 HILIPINES, Luzon, *Taiwan* region, dual trench structure, 73-1960
 henakite, crystal structure, 73-1290; stability in aqueous solutions, 73-1590; *Virginia*, 73-3246
 hengite v. mica
 hillsburg, Montana v. *USA*
 hills County, Kansas v. *USA*
 hillspite, crystal chem., 73-728
 hlogopite v. mica
 hoenix, Arizona v. *USA*
 hoenix Is. v. *Pacific Ocean*
 honolites, *Brazil*, chem., 73-3806; *Czechoslovakia*, linkage of Zr in, 73-1788; *Kenya*, primary analcime & calcite, 73-3032; *Marquesas Is.*, basalt-trachyte, series, 73-4172; *New Zealand*, "mafic", lherzolite nodules in, 73-3075
 hosgenite, *New Mexico*, 73-3252; *Tasmania*, 73-1091
 hoshpammite, crystal structure, 73-1338
 hosphates, anal. of mean bond lengths, 73-3481; biogenic, replacement & solution by SiO₂, 73-4227; β -Ca₃(PO₄)₂, structural relationship with whitlockite, 73-2432; determination of Au in, by NAA, 73-1185; new crystallo-chemical classification, 73-2935; primary, alteration in pegmatites, 73-290; Sr₃(PO₄)₂OH, crystal structure, 73-2429; *Brazil*, metamict, d-values, DTA curve, 73-4070; *Egypt*, genesis of deposits, 73-1477, 1478; *Ghana*, Li-Fe-Mn, secondary in pegmatite, 73-1816; *Indian Ocean*, in carbonate rocks, diagenesis, 73-4264; *Queensland*, geol. of deposits, 73-2530; *Rwanda*, mins. from Buranda pegmatite, 73-1925
 — rocks, *Asia*, Palaeozoic province, 73-292; *Jordan*, factors controlling deposition, chem. anal., 73-1698; *USA*, geochem., 73-2699
 Phosphatic mineralization, *Pakistan*, as basis for stratigraphic correlation, 73-3125
 Phosphorite, As in, 73-1701; crystal chemistry, 73-1699; deposits, aspects of formation, 73-2531
 Phosphorus, comparison in standard rocks by XRF, 73-2291; fugacity and apatite chem. in differentiated igneous intrusion, 73-792; *Carpathian Mts.*, geochem. in Tertiary sediments, 73-1700
 Phosphosiderite, *Ghana*, in pegmatite, 73-1816
 Phyllites, *Italy*, phengite & muscovite in, 73-4015
 Piceance Creek, Colorado v. *USA*
 Picos de Europa, Santander v. *Spain*
 Picotite, *Czechoslovakia*, as heavy min., 73-1897; v. also spinel
 Piemontite, significance in metamorphic facies, 73-3994
 Pierrefitte, Hautes-Pyrénées v. *France*
 Pigeonite v. pyroxene
 Pigeonitic rock series, *Japan*, RE variations, 73-505
 Pilbara Block, *W. Australia* v. *Australia*
 Pillow lavas, magnetic changes due to weathering, 73-3220; *British Isles*, Ti, Zr & Cr in, & petrogenetic affinities, 73-2673; *Hawaii*, in historic flow, 73-2066; *Sicily*, recent, 73-3084; *W. Australia*, spilitic, 73-905
 Pine Point, N.W.T. v. *Canada*
 Pioneer, *W. Australia* v. *Australia*
 Piraziz, Vilayet Giresun v. *Turkey*
 Piscataquis County, Maine v. *USA*
 Pisek, Bohemia v. *Czechoslovakia*
 Pitkin County, Colorado v. *USA*
 Piton de la Fournaise, Réunion v. *Indian Ocean*
 Piz Lucendo, St. Gotthard v. *Switzerland*
 Placers, geol. features, 73-1363
 Plagioclase v. feldspar
 Plagionite, *USSR*, in semseyite-fülöppite series, 73-775
 Planchette, EM & diffraction identification, 73-1823
 Plate tectonics, applied to *Hellenides* & *Canadian Cordillera*, 73-2998; in Rhine graben rift system, 73-2026; model for Archaean crust, 73-3157; some major papers, 73-1195; uplift, rifting & magmatism in continental plates, 73-4089
 Platinum, determination in ores & min. concentrates, 73-3332; NAA determination, 73-78; size & shape of grains, 73-2299; *Hungary*, content of sulphide ores, 73-498; *Montana*, variation in complex, 73-3784; *Russian SFSR*, new solid solutions, (Pt, Pd)₅Sn₂, (Pd, Pt)₇(Sn, Pb)₂, 73-1944
 Platinum-group metals, *Alaska*, geochem. & distribution in mafic & ultramafic rocks, 73-506; *Armenian SSR*, geochem. in Cu-Mo ores, 73-3783; *Central Asia*, geochem., 73-1639
 Platinum group minerals, 73-736
 Playa crusts, *California*, phys. properties, min., 73-2340
 Pleonaste v. *ceylonite*
 Plumassite, *India*, genesis, 73-2143
 Plumbago Mt., Maine v. *USA*
 Plutonic rocks, petrog. study using statistical methods, 73-827
 Plutonium-244, detection in nature, 73-488
 Podmoky v. *Czechoslovakia*
 Podols, extraction of Ce, Fe & Al from by humic extract, 73-534
 POLAND, authigenic albite in Cieszyn limestone, twinning, 73-2856; geothermal isotherms at 200-2500 m depth, 73-1075; ground waters in Tertiary rocks, chem., 73-3845; magnetite spherules of cosmic origin in salt deposits, 73-3977; mineralogical bibliography, 1965-1969, 73-4377; Zechstein carbonate rocks, heavy min. data, 73-4243; north-east, new data on Permian deposits, 73-979; south-west, ore mineralization of Lower Zechstein sediments, min., chem. geol., 73-3535; *Bug R.*, carbonate rocks, min., 73-2083; *Carpathians*, contact metamorphism round teschenite intrusions, 73-1016; *Cieszyn*, geochem. of Lower Cretaceous, 73-3826; transformation of titanomagnetite in teschenites, 73-2877; *Czeszochowa*, calcites in karst formation, 73-4242; *Czeszochowa-Zawiercie* region, foundry sands, min., granulometric study, 73-3632; *Góry Kaczawskie Mts.*, *Wlen*, metasandstones, metaconglomerates, petrol., 73-4329; *Karkonosze*, age of granitoids, 73-10, cover of granite, petrogenesis, structure, 73-4106; *Kłodzko-Złoty Stok* area, age of granitoids, 73-8; *Krynica* region, geol., mineralized waters, 73-551; *Krzeszowice*, kaolinitic clays underlying dolerite, 73-1245; *Leżkowice*, rock salt deposit reserves, tectonics, 73-295; *Lower Silesia*, Au-bearing sands, petrog., min., 73-4245; *Boleslawice*, kaolin deposits, min., petrog., 73-3401; *Oldrychowice*, quartzite-quartz rocks, 73-4310, *Strzegom*, age of granitoids, 73-9, rich occurrence of bavenite, 73-660, *Strzegom-Sobótka*, granite massif, petrol., 73-4186, *Strzegom* & *Strzelin*, natural radioactivity of biotites in granitoid rocks, 73-4013, *Strzelin*, age of granitoids, 73-7, mixed layer kaolinite-smectite, 73-189; *Lublin*, Namurian shales, clay min. composition, 73-1248; *Lwówek Śląski*, pyroclastics in Rotliegendes, petrog., 73-4244; *Mastki*, clay mins. of Poznan Series, 73-3432; *Milowice*, min., structure of montmorillonite clay in coal field, 73-1247; *Niemcza*, age of granitoids, 73-8; *Olkusz* mine, colloidal transport phenomena of ZnS, 73-1419; *Pomerania*, porphyry compounds in Palaeozoic & Mesozoic rocks, 73-3839; *Rybnik*, sandstone characteristics, 73-980; *Silesian Cracow* area, breccias in stratified Pb-Zn deposits, 73-3536; *Snieznik Range*, quartzites, petrog., modal anal., 73-4246; *Stanisławów*, baryte deposit, min., 73-2517; *Sudetes*, feldspars in metamorphic series, 73-4022, *Bystrzyca Mts.*, granite gneisses, 73-4330, *Świerżawa*, Permian-Carboniferous sediments, lithology, 73-4248, tuffaceous sandstones, petrog., modal anal., 73-4247, tuffs & eruptive rock pebbles in sediments, 73-4145; *Świętokrzyskie Mts.*, heavy metals in soils, 73-3859; *Turek*, montmorillonite clays, min., 73-1246; *Włocławek*, jarosite from Pliocene clays, 73-4075
 Polarographic determination, of As in silicate rocks and mins., 73-80; of Co and Ni in Fe meteorites, 73-81
 Pollucite, *Connecticut*, mines, 73-2181; *Japan*, chem., opt. data, 73-732; *S.*

- Pollucite, (*contd.*)
Dakota, 73-2538; *USSR*, in pegmatite, 73-2539
Poltár, Lučenec v. Czechoslovakia
 Polybasite, *Mexico*, data, 73-772
 Polyhalite, *Tunisia*, recent, 73-780
Pomerania v. Poland
Poono, Yilgarn Block, W. Australia v. Australia
 Porcelain materials, alumina-enriched, effect of various fluxes on, 73-1516
 "Porcelanite", *W. Australia*, apparent age, origin, 73-1128
 Porcellaneous rocks, *England*, development, 73-3111
Porkonen, Lapland v. Finland
 Porphyry compounds, *Poland*, in Palaeozoic & Mesozoic rocks, 73-3839
 Porphyrite, *India*, with primary hornblende, 73-896
 Porphyry, *Antarctica*, age, 73-1137; *Sweden*, age, 73-2191; *Yukon*, mineralized, K/Ar age, 73-2227
Port of Spain, Trinidad v. West Indies
Port Talbot, Ontario v. Canada
Porters Creek, Kentucky v. USA
Portland, Connecticut v. USA
Porto Montiz, Madeira v. Atlantic Ocean
 PORTUGAL, north of R. Tagus, fluvial sedimentation in Trias, 73-977; south, metallogenic consequences of plate tectonics, Upper Palaeozoic evolution, 73-2468; *Alto Alentejo*, gneisses, geol., petrog., 73-2136; *Alvarães*, kaolin deposit, clay min., 73-2325; *Amieira*, geol., 73-1987; *Bragança*, Precambrian mylonites, 73-2133; *Carrascal*, volcanic rocks, 73-1986; *Estremoz*, peralkaline orthogneiss, petrog., chem., 73-2135; *Mangualde*, bismuthian tennantite, 73-4060; *Pana-squeira*, age of Sn-W mineralization, 73-5, native Cu-Sn alloy, 73-811; *Santana*, schist & gneiss, structures, 73-2134; *Sintra*, kaolinite in altered veins of porphyry, 73-2326; *Trás-os-Montes*, granites in Silurian sediments, geol., 73-1985
 Potash, *Utah* resources, 73-2527
 Potassium, AAS analytical scheme, 73-48; in Precambrian granulites, 73-3758; NAA determination, 73-3355; X-ray spectrographic anal. in silicate rocks, 73-66; *Asia & Pacific Ocean*, distribution patterns in post-Jurassic granitoids, 73-2981; *B. Columbia*, content of rocks of batholith, 73-1666; *India*, K/Rb ratios in rocks of shield, 73-504; *West Indies*, behaviour in soil clays, 73-1222
 — compounds, KBr, twinning, 73-1509; KCl, crystal growth, 73-1507, measurement of grain boundary mobility, 73-319, new colour centres in crystals, 73-3205
Potgietersburg, Bushveld complex v. S. Africa
Potrillo v. Chile
Potrero Hills, California v. USA
Potůčky, Jáchymov v. Czechoslovakia
Preacher Creek, Wyoming v. USA
 Precipitation, periodic, 73-315
 Prehnite, zoning, X-ray microprobe anal., 73-760; *England*, from contact metamorphic aureole, 73-2848; *Germany*, in basic plutonic rocks, 73-708; *Iceland*, formation in geothermal area, 73-1005; *N. Carolina*, crystals, 73-707; *Virginia*, specimens, 73-1095
 Prehnite-pumpellyite facies, *Maine*, 73-2148
Prince Regent, W. Australia v. Australia
 Proactinium, migration in natural materials, 73-29
 Prosopite, *Germany*, crystal structure, 73-3482
 Proustite, Ag_7AsS_6 inclusions in crystals, 73-1566; crystal growth, 73-1566, 1567; *California*, 73-3584; *France*, in Pb-Zn ores, 73-1891
Provence v. France
Providencia, Zacatecas v. Mexico
 Pseudobrookite, *Germany*, in lamprophyres, min. data, 73-677; *Russian SFSR*, first find in *USSR*, 73-744; *S. Australia*, & other Fe-Ti oxides in complex, 73-2882
 Pseudo-ixiolite, *Manitoba*, EM anal., 73-2888
 Pseudotachylites, *India*, in gneisses, 73-1060; *Manitoba*, Archaean, 73-3006; *S. Africa*, origin, 73-2976
 Psilomelane, *Czechoslovakia*, in baryte vein, 73-1086
 PUERTO RICO, Au as guide to porphyry Cu deposits, 73-2308; general pattern of soils, 73-1261; intensity of deformation, 73-2008; limestones, luminescent properties, 73-2173; river sediments & weathering products, clay min. 73-3420; *Isla Desecho*, geol., 73-2067
 Pumice, soils & clays, pH dependent ion exchange properties, 73-126; *Greece*, identified from archaeological site, 73-4210; *Papua*, high-T flows, 73-3092
Punjab v. India
Purgatoire R., Colorado v. USA
Purkey v. Iceland
Puy-de-Dôme v. France
 Pyrrargyrite, crystal growth, 73-1567; *France*, in Pb-Zn ores, 73-1891
Pyénées-Orientales v. France
 Pyrite, biogenic, in ore deposits, 73-1353; cleavage in, 73-1871; cleavage resistance, 73-341; colour related to quality of polished surface, 73-2898; deformation, 73-2160; elec. conductivity, rectifying properties, 73-2158; framboidal, hydrothermal synthesis, 73-1560; in fossilization, 73-4052; in system FeS_2 - FeSe_2 , table of d -values, 73-377; in U deposits, discrimination of biogenic & chem., 73-1364; quantitative anal. using SEM with energy dispersive X-ray analyser, 73-3350; sedimentary formation, 73-1872; single crystal growth of solid solutions, 73-1559; *Bushveld Igneous complex*, 73-756; *Cyprus*, mode of occurrence of cupiferous deposits, 73-1372; *India*, S isotope study of deposits, 73-494; *Italy*, specimens, 73-3240; *Luxembourg*, octahedral cleavage, 73-3204; *Maine*, specimens, 73-4367; *New Jersey*, nodules, 73-3243; *New York*, sedimentary, X-ray study, 73-4053; *Pacific Ocean*, globules in pelagic ooze, 73-2894; *Peru*, zoning, anomalous opt. behaviour, 73-4061; *Russian SFSR*, form of Au in deposits, 73-737, primary textural indications of Precambrian ores, 73-1374; *Scotland*, occurrence & origin in greywackes, 73-4051; *Spain*, (210) cleavage, 73-343; *Ukrainian SSR*, from coal seams, microtextures, 73-1873; *Urals*, petrog., 73-2497, sulphate mineralization in deposits, 73-265; *Wales*, diagenetic polyframboidal, 73-971; *Yugoslavia*, specimens, 73-4362; *Zambia*, Co variation in, 73-757
 Pyrite-bravoite, X-ray microprobe anal. of zoning, 73-760
 Pyrochlore, determination of Pb, 73-1165; *Quebec*, in silico-carbonatite sill, 73-507
 Pyroclastic material, *Poland*, petrog., 73-4244
 Pyrolusite, *Mexico*, 73-2184
 Pyromorphite, stability, 73-3720; *New Mexico*, 73-3252; *Tasmania*, 73-1091
 Pyrophanite, *Norway*, solid solution with ilmenite, EM anal., 73-1906; *Russian SFSR*, 73-2930
 Pyrophyllite, -kaolinite equilibrium, 73-2617; reorganization by dehydroxylation, 73-1305; stability in pelitic rocks, 73-4229; *New South Wales*, ceramic properties, 73-2540, 3646; *Utah*, origin in shales, 73-1906
 Pyrotilinite, magnified photographs of crystals, 73-1203
 Pyroxene, activity measurements in MgSiO_3 - FeSiO_3 solid solution, 73-414; Ca-Mg-Fe synthesis & unit cell parameters, 73-2611; chem. composition & unit-cell parameters, 73-2827; crystal structure, 73-1299; crystallization trends, 73-1809; fission track annealing, 73-341; lunar, exsolution & phase transformation, 73-3932, petrogenetic significance, 73-3893; Mössbauer spectra, 73-212, in system MgSiO_3 - Fe_2O_3 , 73-223; -plagioclase reaction zone in granulite facies, 73-4316; solid solution ranges in system CaO-MgO-FeO-SiO_2 , 73-410; stability of Fe-rich, 73-1594; stoichiometry & breakdown of omphacite, 73-2829; types of distribution of Fe atoms in, 73-2828; *Canada*, N.W.T., coexisting in granulite-facies gneisses, 73-2826; *Czechoslovakia*, orthorhombic in eclogite, 73-826; *England*, submicroscopic exsolution lamellae, 73-1811; *India*, from charnockite series, 73-2824; *Italy*, in ophiolitic metamorphism, chem. X-ray phys. data, 73-1815; *Norway*, in anorthosite-mangerite series, 73-673; *Ontario*, in ijolite, composition, 73-2868; *S. Australia*, in ultramafic intrusion, 73-2825; *Tanzania*, relation with olivine in rocks, 73-3979
 —, acmite-jadeite, stability at low P, 73-159
 —, aegerine-augite, *Labrador*, Mössbauer spectra, 73-226
 —, augite, & coexisting Al-orthopyroxene crystallog., 73-1812; standard free energy of formation, 73-311; *France*, as stratigraphic indicator, 73-975; *Germany*, fassaitic, in alkali basalts, 73-4143
 —, bronzite, elastic constants, 73-3215
 —, *Montana*, combined EM & anal., 73-3999
 —, clinopyroxene, in lunar porphyritic rocks, crystallization history, 73-3894; in shoshonitic association, chem., 73-672
 —, Na-partitioning with nepheline, 73-3674; thermodynamic properties, 73-411; *Greenland*, zoned alkali, from nepheline syenites, 73-671; *New South Wales*, quantitative EM anal., 73-3347, titaniferous, hourglass zoning, origin, significance, 73-4002
 —, *Norway*, five phases in eclogite, 73-669
 —, *Scotland*, zoned, EM anal., 73-4001
 —, diopside, chrome, as inclusion in diamond, 73-3068; enthalpy of crystallization, 73-1496; fusion in conditions of ultra-high water vapour pressure, 73-1591
 —, *Alps*, chem., opt. data, 73-1791; *Ontario*, -tremolite dolomitic marble, 73-3156
 —, diopside-jadeite series, IR absorption spectra, 73-1813
 —, enstatite, cation disorder in shocked, 73-409; crystallographic orientation of clino-, from deformation of ortho-, 73-3735; polarized spectra of Fe, 73-3459; thermal conductivity at high T, 73-3211
 —, fassaitic, Ti^{3+} , from Allende meteorite, crystal structure, opt. props., 73-3460
 —, *Italy*, specimens, 73-3240
 —, hedenbergite, catalyst for velocity of production reaction, 73-1595; *Yugoslavia*, specimens, 73-4362
 —, hypersthene, *India*, facies transition

- pyroxene, hypersthene, (*contd.*)
 growth in high-grade metamorphics, 73-1046
 jadeite, fracture strength, 73-4003;
 Czech Neolithic axes, origin of material, 73-674; jadeite, melting to 60 kilobars, 73-2612; *Japan*, min., paragenesis, 73-1814
 nephrite, fracture strength, 73-4003;
California, jade deposit, 73-4374
 omphacite, dislocation distributions, 73-4004; eclogitic, breakdown & pyroxene stoichiometry, 73-2829; *Alps*, opt., chem. data, 73-1791; *California*, anti-phase domain structure, 73-2371; *Urals*, opt. phys. data, 73-2830;
 orthopyroxene, Al-, & coexisting augite crystallog., 73-1812; & coexisting olivine in eulysite, distribution of Mg & Fe, 73-2798; bonding in, 73-3458; linear thermal expansion coefficients to 1000°C, 73-3210; thermodynamic properties, 73-411; *Papua*, enstatite-rich, electron petrog. of exsolution, 73-1810; *W. Australia*, manganeseiferous, in metamorphosed Fe formations, 73-4000
 pigeonite, Fe-free, stability at 1 atm., 73-1592; lunar, multiple-twinned & reverse-zoned, 73-3879; structure of high & low, 73-1300; *India*, high calcic, in pegmatitic segregation of dolerite dyke, 73-670
 spodumene, alteration in pegmatites, 73-290; as depth gauge, 73-1597; *Ghana*, in pegmatites, chem. anal., 73-1816; *Manitoba*, from Tanco pegmatite, & petalite relations, 73-2831; *S. Dakota*, large crystals in pegmatites, 73-2538
 pyroxenite, *Austria*, garnet-, pyrope-rich garnets in, chem. anal., 73-3984; *Tanzania*, alkaic xenoliths in volcanic rocks, 73-9033; *W. Australia*, sapphirine-bearing, geochem., 73-536
 pyroxmangite, -rhodonite peritectic along join $\text{MnSiO}_3\text{-MgSiO}_3$, 73-415; *Bohemia*, in Mn deposit, 73-2493
 pyrrhotite, distinction from troilite, 73-4050; hydrothermal crystallization, 73-1557; in system $\text{FeSe}_2\text{-FeSe}$, lattice constants, X-ray density, d -values, 73-377; interaction between cation vacancies, 73-378; isothermal section of state diagram, 73-2584; phase relations & superstructures of Fe_{1-x}S , 73-376; seed for formation, 73-2586; structure types & compositions, 73-1329; synthetic, variation in properties, 73-2587; transformation mechanisms, 73-1558; *Bushveld Igneous complex*, 73-756; *France*, & coexisting sphalerite, X-ray diffraction study, 73-1881; *India*, intergrowths of monoclinic & hexagonal phases, 73-1875; *Maine*, specimens, 73-4367; *Montana*, & pentlandite, 73-4049; *Ontario*, min., thermomagnetic study, 73-2890; *Quebec*, assemblages in sulphide deposit, 73-1874; *Romania*, monoclinic, crystal structure, 73-1330; *W. Australia*, monoclinic with magnetite lamellae, 73-2889; *Yugoslavia*, specimens, 73-4362
 spar & muscovite, 73-431; fission track annealing, 73-341; formation in chamber pegmatite, 73-2861; inversion of microcrystalline, 73-723; low & high, structural relations with low & high T forms of β -eucryptite, 73-1309, 1310; O isotope exchange with H_2O , 73-555; + muscovite, melting, 73-1601, 1602; rate of hydrothermal growth, segregation of V, Ga, Zn, Mg, 73-323; smoky, indicator of U mineralization, 73-1850; structure and growth of synthetic, 73-436; surface textures on grains in limestone, 73-4277; synthesis at Earth-surface conditions, 73-435; thermoluminescence, influencing parameters, 73-2154; vein, temperature of formation, 73-2864; X-ray quantitative determination in silica refractories, 73-1155; *Alaska*, crystallization in volcanic ash, 73-721; *Atlantic Ocean* in aeolian dusts, 73-2088; *California*, distribution in mining area, 73-4128; *France*, thermoluminescence, 73-1852; *Italy*, specimens, 73-1085, 1086; *Japan*, orientation fabric in epithermal ore vein, 73-3069; *Maine*, rose, 73-4367, specimens, 73-4367; *Ontario*, in ore veins, fluid inclusion study, 73-3558; *Romania*, micrographic intergrowths with feldspar & other mins., 73-718; *Russian SFSR*, metamorphism of clastic, 73-2862; *Scotland*, vein, 73-2863; *S. Africa*, tigereye, 73-2643; *Switzerland*, with epidote & tourmaline inclusions, twinning, 73-1851; *Taiwan*, deformation lamella-bearing veins in sandstone, 73-2091; *Yugoslavia*, specimens, 73-4362
 Quartz-type structures, metastable, from kaolinite, 73-1612
 Quartz diorite, geochem., petrogenesis, 73-1670
 Quartz porphyry, *England, south-west*, petrogenesis of dykes, 73-2025; *Michigan*, age, genesis, 73-1142
 Quartz syenite, *New Jersey*, petrol. of intrusion, 73-2042
 Quartzites, natural creep deformation, 73-924; pink Mn-containing resembling pink jade, 73-461; SEM study of cracks & pores, 73-2170; *France*, thermoluminescence, 73-4028; *India*, isogon patterns for minor folds, 73-939; *Ireland*, sedimentary features, 73-4235; *New Mexico*, kyanite-, staurolite-quartzite bands in, 73-1028; *Poland*, petrog., 73-4246, quartz-enriched, 73-4310; *Russian SFSR*, ferruginous, first find in Precambrian of area, 73-2973
 Quartzose rocks, effect of F on silica determination, 73-2267
Quebrada Venado Muerto v. Peru
Queen Maud Land v. Antarctica
Queensland v. Australia
 Quenselite, crystal structure, 73-233
Questembert, Morbihan v. France
 Quickclays, liquid crystals in, 73-2318; nature of, 73-1227, 1228
Quinn Canyon Range, Nevada v. USA
Quirwilca v. Peru
Quseir v. Egypt
Rabun County, Georgia v. USA
Racherla, Andhra Pradesh v. India
 Radiation damage in minerals, 73-1150
 Radon, flux from sea into atmosphere, 73-553; mechanism of release in rock matrices & entry into groundwaters, 73-1714; -222 in lunar atmosphere, 73-2785
 Raite, *Russian SFSR*, new min., 73-4081
Rajagarh, Ajmer v. India
Rajasthan v. India
Rajghir, Bihar v. India
Rajputana v. India
Ramagiri, Andhra Pradesh v. India
Ramsgraben, Salzburg v. Austria
Rammelsbergite, Bushveld complex, possible occurrence, 73-756; *Ontario*, anal., 73-3554; *Spain*, chem. anal., 73-770
Ramona, California v. USA
 Ramsayite, *Russian SFSR*, 73-2930
 Ramsdellite, *Mexico*, 73-2184
 Rancieite, *Mexico*, 73-2184
 Rapakivi structure, *India*, in migmatites, 73-1059; *New South Wales*, in adamellite, 73-3047
Rancagua v. Chile
 Rare earth elements, distribution in progressively crystallizing minerals, 73-484; in Apollo 12 samples, 73-3915; in Archaean greywackes, 73-3835; in basalts, 73-510, 511; in Precambrian sediments, 73-3834; relative affinities of mins., 73-2667; *Iceland*, in neovolcanic rocks, 73-1672; *Idaho & Montana*, in Th veins, 73-2668; *Sierra Nevada batholith*, fractionation in accessory mins., 73-2669; *Swiss Alps*, distribution in various rocks, 73-3531
 — minerals, spectral analysis, 73-1167
 Rasleighite, *Cornwall*, crystallographic study, 73-2934
Raspol, W. Bengal v. India
 Rathite-II v. liveingite
 Rathlin I., Antrim v. Ireland
Ratnapura v. Sri-Lanka
Rawalpindi v. Pakistan
Ray, Arizona v. USA
 Reaction kinetics, in solid state, thermal anal., 73-2263
 Reagar, - α -AsS inversion, 73-2593; high- T phase, crystallography, 73-2424; low-, *Chile*, opt., EM data, 73-2901
Reaphook Hill, S. Australia v. Australia
 Rectorite, & rectorite-like layer structures, 73-105; *Arkansas*, in veins in sandstone, chem., X-ray data, 73-1835; *Utah*, origin in shales, 73-196
Red Hill, New Hampshire v. USA
Red Mts., Colorado v. USA
 Red Sea, dispersion of metals from brines, 73-2308; formation of ferroan nontronite by geothermal system, 73-187; new deeps with brines & metalliferous sediments, 73-3524; sediments from drilling, 73-2472; volcanic islands, petrog., petrogenesis, 73-4194; *Gulf of Aqaba*, reefs, carbonate sediments, waters, geol. & geochem., 73-3828; *Gulf of Elat*, U distribution in carbonate sediments of hypersaline pool, 73-2714
 Reefs, & stratiform ore deposits, 73-2299
 Reef facies, dolomitization & stratified mineralization, 73-251
 Reflectance measurement with automated microphotometer, 73-4347
 Refractive index, of gemstones by direct measurement, 73-462; adjustment of Fedorow universal stage for determination, 73-31
 Refractometer, Rayner Dialdex, 73-463; in gemmology, 73-464
 Refractory clays, *Pakistan*, 73-3636
 Refractory raw materials, review, 73-3625; selection, 73-1472; *Egypt*, chem., DTA, TGA, X-ray patterns, 73-1476
Reggio Calabria v. Italy
Remire, Amirante Is. v. Indian Ocean
 Resistivity anomalies, surface exploration for, 73-2174
 Resources, measurement of potential, 73-245

- Retigraph, new, with pure precession motion, 73-1157
- Réunion I. v. Indian Ocean*
- Revelstoke, B.C. v. Canada*
- Reyerite, Greenland, crystal structure, 73-3469*
- Reykjanes v. Iceland*
- Rhenium, geochem. in oxidation zones of sulphide deposits, 73-1630; in lunar rocks, 73-3908, 3912*
- Rhine graben area v. Germany*
- Rhode Island v. USA*
- RHODESIA, Archaean craton, evolution, 73-3157, tectonic development, 73-944; Archaean shield, strain values, 73-4092; Chindamora batholith, granites, chem. anal., 73-4095; Kamatiti District, geol. of Sn-bearing pegmatites, 73-3537*
- Rhodium, Alaska, alloys in Pt nugget, 73-4040; Montana, variation in complex, 73-3784*
- Rhodochrosite, manometric determination, 73-4067; magnified photographs of crystals, 73-1203; Argentina, banded, 73-2920; Yugoslavia, specimens, 73-4362*
- Rhodolite v. garnet*
- Rhombohedral porphyry, Sweden, dykes, relation to dolerite dykes, 73-3018*
- Rhönite, France, in melaphonite, chem. opt., X-ray data, 73-1825*
- Rhoude-el-Baguel v. Algeria*
- Rhyodacite, garnet-bearing, crystallization under high-P hydrous conditions, 73-1527; Hawaii, composition, occurrence, 73-4171*
- Rhyolite, magmas & contemporaneous basaltic, 73-3677; New Zealand, petrog., 73-2058; Wyoming, stratigraphy of plateau, 73-968*
- Rhodonite, pyroxmanganite peritectic along join $MnSiO_3$ - $MgSiO_3$, 73-415*
- Rice Lake, Manitoba v. Canada*
- Richterite v. amphibole*
- Richughuta, Bihar v. India*
- Rickardite, Russian SFSR, X-ray powder data, reflectance, 73-1894*
- Riebeckite v. amphibole*
- Riekensglück, Harz Mts. v. Germany*
- Rieti v. Italy*
- Rift faulting, Kenya, age, 73-2204*
- Rift structures, Kenya, correlation with Red Sea trough, 73-1122*
- Riley County, Kansas v. USA*
- Ring complexes, Russian SFSR, geol., 73-3086*
- Rio Arriba County, New Mexico v. USA*
- Rio Vista, California v. USA*
- Ripidolite, Italy, good crystals, 73-1085*
- Risør v. Norway*
- Riverside County, California v. USA*
- Riwaka v. New Zealand*
- Road materials, British Isles, 73-1474*
- Roadstone, Wales, resources, industry, 73-1371*
- Roberts Victor Mine v. South Africa*
- Roccamonfina v. Italy*
- Rock Springs, Wyoming v. USA*
- Rockabill, Donegal v. Ireland*
- Rockall Bank v. Atlantic Ocean*
- Rockaway Pt., New York v. USA*
- Rockbridge, Virginia, 73-3246*
- Rock alteration systems, diffusion in, 73-2570*
- Rocks, classification, recent criteria, 73-2953; minerals & gemstones, book, 73-1200; thin slabs, X-ray radiography of, 73-3316*
- Rocky Hill, California v. USA*
- Rocroi massif, Ardennes v. Belgium*
- Rodalguilair v. Spain*
- Rødhammeren, Sør-Trondelag v. Norway*
- Rodingite, New Zealand, from alteration of gabbro, 73-4005; Pakistan, chem. anal., X-ray, DTA, 73-4313*
- Roesslerite v. rösslerite*
- Rogaland v. Norway*
- Rogers Pass, B.C. v. Canada*
- Romanche Trench v. Atlantic Ocean*
- ROMANIA, Banat, Vărad, sepiolite of hydrothermal origin, 73-706; Carpathians, allanite and monazite, 73-661, geothermometry of pegmatites, 73-1988; Kisbánya, monoclinic pyrrhotite, crystal structure, 73-1330*
- Rona, Inverness v. Scotland*
- Rookhope, Durham v. England*
- Rosasite, Arizona, specimens, 73-3247; - New Jersey, 73-4370*
- Rossberg, Vosges v. France*
- Rösslerite, crystal structure, 73-2439*
- Ross-shire v. Scotland*
- Rotliegend, essays on Lower Permian, 73-978*
- Rouge, Loire Atlantique v. France*
- Rough Rock Lake, Ontario v. Canada*
- Rouyn-Noranda, Ontario v. Canada*
- Rozdolsk, Ukrainian SSR v. USSR*
- Rozenite, Iowa, in sulphate efflorescences, 73-2913*
- Rubidium, AAS & flame emission spectroscopy analytical scheme, 73-49; in Precambrian granulites, 73-3758; B. Columbia, content of rocks of batholith, 73-1666; India, K/Rb, Ba/Rb ratios in rocks of shield, 73-504; S. Dakota, reserves in mine dump, 73-3649*
- Rubidium-strontium isotopes, as test for age of weathering profiles, 73-541*
- Ruby, flux-fusion "Kashan" synthetic, 73-461; laser crystals, determination of tr. elems. in, 73-72, solubility, 73-1515; valuation principles, 73-466; N. Carolina, occurrences, 73-457, 2633, 3299*
- Ruby Creek, Bornite, Alaska v. USA*
- Rudnyy Altai, Russian SFSR v. USSR*
- Russian SFSR v. USSR*
- Rustenberg v. S. Africa*
- Ruthenium, determination in residues from leaching of mattes, 73-53*
- Rutile, crystallographic shear, 73-96; epitaxial growth of Cr_2O_3 crystal on, 73-1543; high purity synthetic, from domestic ilmenite concentrate, 73-1542; lunar, EM anal., 73-2770; Guyana, in placers, 73-754; India, radioactivity, 73-650; S. Australia, & Fe-Ti oxides in complex, 73-2882; Togo, U-Th palaeoplacer deposits, 73-262; W. Australia, economic concentrations, 73-992*
- Rutile, "pseudorutile", S. Australia, data, 73-745*
- RWANDA, Buranga pegmatite, phosphate mins., 73-1925*
- Rybnik v. Poland*
- Ryōke f. Japan*
- Ryūjima, Nagano v. Japan*
- Saanich Inlet, B.C. v. Canada*
- Saar-Nahe trough v. Germany*
- Sabah v. Malaysia*
- Safaga v. Egypt*
- Safflorite, Ontario, anal., 73-3554*
- Safflorite-löllingite, Bushveld Igneous complex, 73-756*
- Saga v. Japan*
- Salcrete, New York, 73-3135*
- Sahamallite, California, RE source in ore-body, 73-3655*
- Saindak, Chagai v. Pakistan*
- St. Andrews, Jamaica v. West Indies*
- St. Bees, Cumberland v. England*
- Ste. Genevieve County, Missouri v. USA*
- St. Gotthard v. Switzerland*
- St. Hilaire, Quebec v. Canada*
- St. Jacut-de-la-Mer, Côtes-du-Nord v. France*
- St. John's, Newfoundland v. Canada*
- St. John's I. v. Egypt*
- St. Michel, Montreal I., Quebec v. Canada*
- St. Quay, Portrieux, Côtes-du-Nord v. France*
- St. Vincent v. West Indies*
- Sakhalin, Russian SFSR v. USSR*
- Saliferous formations, Tunisia, hydrothermal metamorphism of, 73-3147*
- Salmon, California v. USA*
- Salmon River Breaks, Idaho v. USA*
- Salt, behaviour when irradiated, 73-372; deformation at 20°-200°C, 73-3722*
- deposits, marine, geol. significance & minor elem. composition, 73-1703; Angola, 73-1954; Arizona, geol. of occurrence, 73-1702; Denmark, geophys. study of dome, 73-4350; England, resources, 73-3627; Oklahoma, resources, 73-1361, 1367, 1489; Poland, reserves, tectonic, 73-295; Somerset, from borehole, 73-252*
- Salta v. Argentina*
- Saltpetre, Tennessee, mining history, 73-111*
- Saltpond v. Ghana*
- Salts, exchange between ocean & air, 73-2723; ionized, in porous strata, determination of coefficient of free diffusion, 73-117*
- Salt Flat, Texas v. USA*
- Salt Lake crater, Hawaii v. USA*
- Salzburg v. Austria*
- Samarskite, Norway, Sn content, 73-3765*
- Sampling, problems in geoscience, 73-220*
- San Andreas, California v. USA*
- San Benito County, California v. USA*
- San Fernando, Azuay v. Ecuador*
- San Gabriel, California v. USA*
- San Juan, Mts., Colorado v. USA*
- San Lorenzo Tenochtitlan v. Mexico*
- San Pedro Valley, Arizona v. USA*
- Sand, dune, origin of reddening, 73-3803; unconsolidated wet, plastic-tube coring technique, 73-2246; Bangladesh, beneficiation for glass-making, 73-3643; Egypt quartz, min., 73-4252; India, resources, 73-3645; Oklahoma, silica, resources, 73-1489; Pakistan, beneficiation for glass making, 73-3642, 3643; Poland, foundry sands, min., granulometric study, 73-3632; United Kingdom, production, 73-3628; USA Atlantic coast, min., 73-3144*
- Sandstone, classification, 73-4220; flexibility-structure-property relation, 73-1082; luminescence petrog. as aid to petrology, 73-4222; porosity & chlorite coatings on quartz grains, 73-4287; Antarctica, composition, 73-3124; Czechoslovakia, chem. composition & its significance, 73-474; England, with high baryte content & cement, 73-4236; Hungary, sedimentology, 73-982; India, with authigenic feldspars, 73-4258; Ivory Coast, calcite cemented, created by tree sap, 73-4266; Libya, geol., 73-2089; Montana, lithological trends, 73-3134; Poland, nature of dolomite cement, 73-980, tuffaceous petrog., modal anal., 73-4247; Sri-Lanka beachrock, petrog., 73-4259; Taiwan deformation lamella-bearing quartz veins in, 73-2091; Utah, lacustrine & fluvial petrog. distinction, 73-3141*
- Sandia Mts., New Mexico v. USA*
- Sandine v. feldspar*
- Santa Cruz, California v. USA*
- Santa Rita Mts., Arizona v. USA*

- Santana v. Portugal*
Santanaite, Chile, new mineral, 73-2948
Santiago v. Spain
Santiago, Cape Verde Is. v. Atlantic Ocean
Santorini v. Greece
Saponite v. smectites
Sapphire, basal dislocations, 73-234; epitaxial growth of ZnS on, 73-329; needles in, 73-452; origins of colour of yellow, blue and green, 73-451; valuation principles, 73-466; *New South Wales*, in stream sediments, 73-453; *N. Carolina*, occurrences, 73-457, 3249; *Tanzania*, 73-2634
Sapphirine, France, at contact of lherzolite, genesis, chem. anal., 73-1802
Sapporo v. Japan
Sapropelic mud, Mediterranean Sea, destruction of montmorillonite in, 73-203
Saratov, Russian SFSR v. USSR
Sarawak v. Malaysia
Sardinia v. Italy
Sarrabus, Sardinia v. Italy
Sartorite, Peru, in solid gel, 73-2906
Saskatchewan v. Canada
Satnur, Mysore v. India
Sau Alp, Carinthia v. Austria
Sauconite, acid character of, 73-136
SAUDI ARABIA, southwest, layered gabbros, ages, 73-3035; *Jebel Al Wask*, serpentinised ultramafic complex, structure, 73-2034
Sauertown Mt., N. Carolina v. USA
Sayan, Russian SFSR v. USSR
Schorbite, crystal structure, 73-2414
SCANDINAVIA, age of metamorphic Caledonide events, 73-1116
Scandium, geochemistry, book, 73-3359; non-destructive NAA, 73-73
Scania v. Sweden
Scanning electron microscope, used with energy dispersive X-ray analyser for quantitative anal., 73-3350
Scapolite, crystallographic data & refr. ind., 73-2870; fluorescence, 73-4031; S valency in, 73-1673; *Egypt*, cancrinite association, petrog., chem., X-ray powder diffraction data, 73-4032; *New York*, anti-phase domain structure, 73-2394; *Switzerland*, refr. ind., 73-4365
Scawtite, California, crystal structure, 73-2365
Schachnerite, Germany, new mineral, 73-1941
Scheelite, Austria, molybdenite-tungstenite inclusions in, 73-4062; ore fabrics in deposits, 73-255; specimens, 73-3240; *New Zealand*, anals., 73-4064; *Portugal*, 73-1985; *Switzerland*, 73-2179; *Tasmania*, in skarn, origin, 73-3614; *Virginia*, 73-3246
Schefferville, Quebec v. Canada
Schirmerite, Colorado, new data, 73-2893
Schists, pelitic, material import during metamorphism, 73-2130; shear plane fractures in garnet porphyroblast, 73-4336; *Anglesey*, Precambrian glaucophane, affinity with ocean floor basalt, 73-4100; *Antarctica*, age, 73-1137; *Britany*, crystallinity of micas in, 73-2102; *New Zealand*, myrmekites in, 73-4027; *Portugal*, folded, structure, 73-2134; *Spitzbergen*, glaucophane, min., XRF anals., K/Ar ages, 73-1041; *Taiwan*, age, 73-1127, quartz fabrics & stress orientation, 73-943
Scholzite, S. Australia, crystal structure, 73-3502
Schreiber, Ontario v. Canada
Schwarzwald v. Germany
Scorodite, Czechoslovakia, in conglomerates, 73-1930; *Ontario*, supergene min., 73-3562; *S. Dakota*, in mine dump, unreported, 73-3649
SCOTLAND, Dalradian Green Beds, geochem. origin, metamorphism, 73-2117; Dalradian kyanite-bearing metamorphics, 73-2118; min. collecting sites, 73-1084; Moine nappe, sodic rocks of metasomatic origin, 73-2101, strain values, 73-4092; Torridonian, tectonic setting, 73-4098; central, Namurian paralic sedimentation, 73-3110; *Galloway*, occurrence & origin of pyrite in greywackes, 73-4051; north, detection of concealed mineralization, 73-2308, length of Dalradian sedimentation, folding & metamorphism age, 73-1116, stream-sediment sampling, 73-2752; north-east, clay mineral formation in weathered boulder conglomerate, 73-208, metamorphic index mins. in Dalradian, 73-4325, myrmekites of exsolution & replacement origins, 73-716; north-west, age of Lewisian granulites, 73-2195, "Fucoid Beds", authigenic feldspars in, 73-4230, leucocratic syenites, comparative petrol., 73-1972, Lewisian sheets within Moines, 73-3165, original nature of Archaean rocks, 73-538; *Southern Uplands*, greywacke correlation on chem. data, 73-3870
—, *ABERDEENSHIRE, Glen Gairn*, zinnwaldite granite, 73-1829
—, *ARGYLL, Ardnamurchan*, cone sheets, geochem., 73-2022; *Coll*, tectonic evolution of Lewisian complex, 73-3163; *Easdale*, intrusion of basalt dykes showing flow lineation, 73-859; *Glen Coe*, quartzite breccias, from linear vein, petrol., 73-4137; *Mull*, palaeomagnetism of regional dyke swarm, 73-3228; *Tayvallich*, petrochem. of epidiorites, 73-2119; *Tiree*, structure & metamorphism of Lewisian, 73-4324
—, *AYRSHIRE*, bauxitic clay is flint-clay, 73-179
—, *INVERNESS-SHIRE, west*, microcline porphyroblasts in Moinian rocks, 73-2116; *Allt Slapin*, rhyolitic injection-breccia in tuff, 73-3081; *Barra*, age of Scourian, 73-3, Scourian-Laxfordian relationships, 73-3164, structure & tectonic history of Lewisian gneiss, 73-2114; *Dalwhinnie*, vein quartz, 73-2863; *Mullach nan Coirean*, andalusite in margin of granite, 73-858; *Rona*, geochronology, 73-3278; *Shiant Is.*, zoned clinopyroxenes, EM anals., 73-4001; *Skye*, Eocene lavas, major elem. variation, 73-857; *South Uist*, deformation in development of Laxfordian complex, 73-2966
—, *KIRKCUDBRIGHTSHIRE*, tectonic control of Carboniferous sedimentation, 73-4231
—, *MIDLOTHIAN, North Esk Reservoir*, rate of sedimentation, 73-4232
—, *ROSS-SHIRE*, Torridonian volcanic sediments, 73-3019; *Carn Chuinnneag*, granite pluton, structure & structural dating, 73-4182; *Fannich Forest*, Moinian calcisilicate gneisses, petrol., 73-2115; *Loch Torridon*, structural development of Lewisian, 73-3166
—, *SHETLAND IS.*, tuffisitic breccias, tuffisites & associated carbonate-sulphide mineralization, 73-2965; *Fair Isle*, igneous intrusions, mineralization, 73-2964, Old Red Sandstone sediments, 73-3109; *Mainland*, east, succession of metamorphic rocks, 73-3162
—, *STIRLINGSHIRE, Campsie Fells*, carbon-dioxide metasomatism in lavas, 73-3146
—, *SUTHERLAND*, structure of Lewisian, 73-2021, *Loch Inchard to Loch Laxford*, structure of Lewisian rocks, 73-926; *Scourie*, fluid transport & shear zones, 73-925, high-T shear zones, min., 73-4307
Scott, W. Australia v. Australia
Scott County, Illinois v. USA
Scourie, Sutherland v. Scotland
Sea of Japan, aeolian dust loadings, min., 73-4263
Sea of Okhotsk v. USSR
Sea-bottom surveying, gamma spectrometer for, 73-1187
Sea-floor spreading, & continental drift, 73-2305
Seabrook Lake, Ontario v. Canada
Searles Lake, California v. USA
Sebkha el Melah v. Tunisia
Secovlje v. Yugoslavia
Sedimentary basins, classification, 73-2073; relative mobility of elems., 73-2691
— rocks, banded ferruginous-cherty, nomenclature, 73-3510; polytypism of chlorine in, 73-701; Precambrian, burial metamorphism, 73-4302, RE abundances, 73-3834; quantitative min. anals., method comparison, 73-3314; solution-transfer in deformation, 73-2069; *Carpathian Mts.*, geochem. of P in Tertiary, 73-1700; *Fair Isle*, geol., 73-3109; *Yorkshire*, petrog. of cyclothems, 73-2079
— structures, fluvial, experimental formation, 73-2074
Sedimentation, in geol. history, 73-3108; rate in reservoir, 73-4232; role of coagulation in natural waters, 73-2071; tracer for rates of, 73-2741; *Australia*, Archaean geosynclinal, 73-988; *Portugal*, "molassic" facies, 73-977; *Scotland*, tectonic control at margin of basin, 73-4231
Sediments, anoxic marine, Mg-Fe replacement in clay mins., 73-201; argillaceous, compaction, diagenesis & migration, 73-2072; calcareous, book, 73-3363; compacted, distribution of garnet in, 73-4233; continental shelf, chem. changes in interstitial H₂O, 73-3849; EM of quartz grains transported in rivers, 73-722; elemental S in recent, 73-2693; fluorescent tracers, 73-2248; genesis of certain finely-laminated, 73-973; humic low rank metamorphism & diagenesis in, X-ray diffraction studies, 73-4228; in closed lake, min. & chem. changes, 73-3812; interstitial waters, chem. composition, 73-3691; limit of involvement in genesis of orogenic volcanic rocks, 73-2982; lithified carbonate deep-sea, geochem., 73-1684; marine, acoustic properties, 73-3234, Mn oxide component variations, 73-2712, U concentrations in, 73-2711; n-alkane content, 73-3817; of varied origin, orientation of sand grains in, 73-3119; ores in, congress papers, 73-2299; phys. properties related to environment & depth, 73-2075; preparation of thin-sections, 73-2245; routine anal. of carbonate in, 73-2279; sandy, evaluation of two dimensional micro-measurements of grain sizes, 73-2241; thin-section criteria for fluvialite deposition, 73-4294; unconsolidated, impregnating cores, 73-2247; *Antarctica*, tr. elem. chem., heavy mins., 73-4266; *Atlantic continental shelf*, petrol. of sand fraction, 73-1003; *Atlantic Ocean*, distribution of Zn, 73-1683, Horizon A, & Eocene volcanism, 73-1004; *B. Columbia*, in reducing fjord, chem. changes in inter-

Sediments, anoxic marine, (*contd.*)

stitial water, 73-1677; organic constituents, 73-1679, tr. elems., 73-1678; *Dead Sea*, organic geochem., 73-533; *France*, augite as stratigraphic indicator, 73-975, laminated, origin, 73-974; *Germany*, argillaceous, initial porosity related to palaeosalinity, 73-4240; *Illinois*, late Pleistocene, chem. compared with present, 73-3820; *Israel*, origin of "Mottled Zone", 73-985; *Lake Geneva*, Hg in, 73-1680; *Lake Michigan*, velocity of sound in, 73-4349; *Lake Superior*, Holocene, Fe & Mn-rich layers in, 73-3822, Quaternary, stratig. min., tr. elem. concentrations, 73-2694; *Mediterranean*, magnetization, 73-3222; *New York*, laminated, importance of diatoms in, 73-998; *N. Carolina coast*, organic & tr. elem. content, 73-543; *Pacific Ocean*, min., 73-2985; *Sea of Okhotsk*, metal distribution in, 73-2713; *Switzerland*, Hg in lakes, 73-1681; *Uganda*, carbonatite-derived, 73-984; *W. Australia*, analogous to recent North Sea sediments, 73-993; *USA*, characteristics of estuarine, 73-3133

Sedmochislenitsi v. Bulgaria
Seiland, Finnmark v. Norway
 Selenite, *Mississippi*, specimens, 73-1098
 Selenium, *Tasmania*, content of sulphides, 73-3764
 Seligmannite, crystal structure, 73-1332; *Peru*, paragenesis, 73-4061
 Semseyite-fülopptite, homologous series, 73-775
 Senarmontite, crystallization under hydrothermal conditions, 73-1545; formation under bacterial conditions, 73-1546; *Manitoba*, from alteration of aluminosilicate, 73-2900
 Sepiolite, dehydration, 73-3373; *California Coast*, assoc. with Miocene diatomite, 73-704; *Nevada*, major constituent of playa deposit, 73-705; *Norway*, in Ag deposit, 73-1824; *Romania*, of hydrothermal origin, 73-706; *USA High Plains*, genesis, 73-180
Serau, Gujarat v. India
Sergipe v. Brazil
 Sericite v. mica
 Serpentine, impurity in talcum powder, 73-698; *Canada & Mid-Atlantic Ridge*, in ultrabasic intrusions, min., 73-696; *Japan*, min. studies, 73-697; *Norway*, with white crystalline magnesite, 73-788
 Serpentine rocks, *W. Australia*, associated with NiS mineralization, petrol., 73-497
 Serpentinite, *Colombia*, fragmented, 73-2008; *Elba*, geochem., 73-1984; *New South Wales*, geol., 73-1022; *Switzerland*, min. of fissured zones, 73-1801
 Serpentinization, metamorphic assemblages and direction of flow of metamorphic fluids, 73-1021; nature of, 73-1023; *Alaska*, related to volume increase, 73-1024; *New South Wales*, 73-910
Serra dos Carajas v. Brazil
Severo Ural'sk, Kazakhstan v. USSR
 Sevier Lake, *Utah v. USA*
Shaba v. Zaire
Shabad, Bihar v. India
 Shadlunite, *Russian SFSR*, new sulphide min., 73-4082
Shahpura, Jaipur, Rajasthan v. India
Shakanai, Akita v. Japan
 Shales, durability-plasticity classification, 73-1264; effect of weathering on organic matter, 73-2708; preparation of ultrathin rock sections for EM, 73-41; rapid determination of total organic and in-

organic C, 73-62; stanols from Green River formation, 73-2709; *Canadian Shield*, Hg in Precambrian, 73-1682; *England*, B & other elements in Namurian, 73-523; *Gulf Coast*, burial diagenesis, 73-199; *Illinois*, resources, 73-3439; *Kansas*, O isotopes in, 73-542; *Kentucky*, anals., 1960-1970, 73-1265; *Michigan*, age, origin of sulphides, 73-1141; *Poland*, clay min. composition, 73-1248; *Queensland*, hydrocarbons & fatty acids in, 73-1728

Shap, Westmorland v. England
Shatford Lake, Manitoba v. Canada
Sheffield, Yorkshire v. England
Shefford Mt., Quebec v. Canada
Shellabarger Pass, Alaska v. USA
Shenandoah National Park, Virginia v. USA

Shetland Is. v. Scotland
Shiant Is., Inverness v. Scotland
Shigekuma, Tsumima v. Japan
Shinyo, Nagano v. Japan
Shirley Basin, Wyoming v. USA
Shonkin Sag, Montana v. USA
 Shonkinite, compared with microsyenite, 73-867

Shoshonites, chem. data on some mins., 73-672; *Devon*, geochem., 73-515; *Torres Strait*, chem. anals., 73-907
 Shoshonitic association, *Tasmania*, in upper Mesozoic, 73-3049
 Shoshonitic magma series, TiO_2 content distinction from alkaline series, 73-817

Shropshire v. England
Siberia, Russian SFSR v. USSR
 Siderite, C isotopes in, 73-1655; DTA, in mixtures with kaolinite, 73-789; manometric determination, 73-4067; Mössbauer spectra, 73-212; *Czechoslovakia*, in coal seams, chem. 73-1918; *Italy*, specimens, 73-3240; *Norway*, in erratic iron-stone boulders, 73-970

Sideritic concretions, *Illinois*, phys., min., chem. data, 73-4283
 Sideromelane, rate of formation of palagonite form, 73-2066
Siehegebirge v. Germany
Sieber, Harz Mts. v. Germany
Sierra de Carrascos v. Spain
Sierra de los Filabres v. Spain
Sierra Garda v. Chile
Sierra National Forest, California v. USA
Sierra Nevada, California v. USA
Sierra Nevada v. Spain
Siilinjärvi v. Finland

Silcrete, nature of, 73-2307; *S. Australia*, composition and genesis, 73-995
 Silhydrite, new mineral, 73-810
 Silica, activity in kimberlite, 73-4175; -bi-carbonate balance in ocean & early diagenesis, 73-2722; correlations between Si-O bond length, Si-O-Si angle & bond overlap populations, 73-2359; determination in quartzose rocks, effect of F content on, 73-2267; determination in silicates by XRF, 73-2289; effect of tetrahedral angles on Si-O bond overlap populations, 73-2360; elementary bricks, 73-3254; film on bricks, 73-2542; in diatoms experimentally replaced by calcite, 73-351; rapid spectrophotometric determination in rocks, mins. & Ti ores, 73-1162; role of marine gastropods in fixation, 73-525; thermal expansion behaviour of $\text{SiO}_2 \cdot \text{H}_2\text{O}$ & $\text{SiO}_2 \cdot \text{NaOH} \cdot \text{H}_2\text{O}$, 73-1494; *England*, diagenesis in Upper Jurassic limestones, 73-3112; *Montana*, mining, 73-1401; *Vermont*, diffusion round syenite intrusion, 73-4317; *Wisconsin*,

sandstone reserves, phys., chem. properties, 73-3653

— minerals, thermal alteration for better fracture properties, 73-1112
 — refractories, X-ray quantitative determination of quartz, cristobalite & tridymite, 73-1155

Silicate ion, & $\text{L}_{2,3}$ X-ray spectra, 73-219

Silicates, buffering and standard addition technique in AAS, 73-47; cathode polarographic determination of As, 73-80; chem. weathering by organic acids, 73-3688; classification, 73-1275; crystal growth under high P, 73-1619; determination of Ba & Sr, 73-44; determination of ferrous and ferric ions, 73-56; formation of polyorganosiloxanes from, 73-35; graphical representation of oxidation sulphidation, 73-1492; isotope geochemistry, 73-2754; kinetics of mass transfer with aqueous solutions, 73-1493; layer ditrigonal rotation of tetrahedra, 73-237; Li-Mg-Zn, crystallization, 73-1581; liquid systems, densities, 73-2563; luminescence of Eu^{2+} -activated $\text{SrB}_2\text{Si}_2\text{O}_8$, 73-158; mathematico-statistical methods in research, 73-1512, melts, partitioning chloride with coexisting aqueous phase, 73-2547; $\text{NaBa}_3(\text{Si}_2\text{O}_7)_2\text{OH}$, crystal structure, 73-1294; $\text{Na}_2\text{Mg}_2\text{Si}_6\text{O}_{15}$, crystal structure, 73-2375; new anion in $\text{Na}_2\text{Mg}_2\text{Si}_6\text{O}_{15}$, 73-229; Mg, Co, Ni, Zr thermodynamics of formation, 73-149; orthosilicate & metasilicate solid solutions, activity measurements, 73-41; ortho-, Cr^{2+} containing, synthesis, optical absorption spectra, 73-158; rapid determination of B in, 73-57; rapid extraction & determination of iron(II), 73-2268; trioctahedral sheet, structural transformation, 73-1303; X-ray spectrometry anal., technique, 73-68

— chain, core binding energy difference between bridging & non-bridging O atoms, 73-224;

— materials, rapid estimation of B_2O_3 , 73-1166; *W. Australia*, paragenesis iron formation, 73-681

— rocks, determination, of As, cathode-polarographic, 73-80, of Cl, rapid, 73-328, of acid-evolved CO_2 , 73-58, of I, 73-55, of cassiterite & silicate-bound S, 73-3337, of Cl by XRF, 73-1177, of Fe, 73-45, of tin, oscillographic, 73-474, of by NAA, 73-74; Fe determination method comparison, 73-3325; photometric method determination of B, 73-59, of I, 73-60; rapid extraction & determination of iron(II), 73-2268; standard, review, 73-1735; U, Th, Pb concentrations in standards, 73-2740; XRF anal., new method of flux-fusion, 73-67; X-ray spectrographic anal. for Fe, Ti, Ca, K, Al, 73-66; X-ray spectrometric determination of major elems., 73-3344

Silicification, of wood, 73-3255
 Silicites, *Belgium & Corsica*, bedded, comparison, 73-4238

Silicon, AAS analytical scheme, 73-4; crystal growth in metal films, 73-366; X-ray spectrographic anal. in silicate rocks, 73-66

— isotopes, in lunar samples, 73-3909
 Sillimanite, conversion from kaolinite, 73-403; *France*, in basaltic tuff, 73-175; *India*, hydrothermal development Central Gneisses, 73-1027; *Italy*, nodules in anaxites, 73-3174; *S. Africa*, reserves, 73-3633

Silver, adsorption & coprecipitation

- silver, (*contd.*)
 hydrous oxides of Fe & Mn, 73-486; determination, in Ag-Au alloys by reflected-light microscopy, 73-3320, in ores & mins. by AAS, 73-336; in native Au, effect of laboratory treatment, 73-2274; *Alaska*, geochem. anomalies, 73-285; *California*, mining history & geol., 73-3584; *Chile*, native arsenian, 73-4037; *Colorado*, mining map, 73-1403; *Montana*, mining, 73-1401; *New Mexico*, resources, 73-3587; *New Zealand*, precipitates from thermal waters, 73-1448; *Pennsylvania*, geochem. prospecting, 73-568
 deposits, *Austria*, genesis, 73-252, 253; *Bolivia*, 73-289; *California*, resources, 73-2490; *Czechoslovakia*, petrol., 73-257; *Idaho*, min., trace elem. content, 73-3619; *Norway*, asbestos mins. in, 73-1824; *Ontario*, geol., min., 73-3547 to 3566, native, endogenic haloes, 73-2308; *Russian SFSR*, types, geol., min., 73-1376; *S. Dakota*, in mine tailings, 73-3617; *Utah*, petrol., 73-2510, 2511
 — minerals & compounds, Ag₂S, monoclinic, crystal growth, 73-335; chromate, periodic precipitation, 73-315; iodide, crystal growth, 73-334, 337; new synthetic sulphosalt, AgPbSb₃S₇, 73-1563; *Kazakhstan & Russian SFSR*, new Bisulphides of Ag, Cu, Pb, 73-1945
Silver Bow mine, Montana v. USA
Silver Peak Range, Nevada v. USA
Silvermines, Tipperary v. Ireland
Sinai v. Egypt
Singhbhum, Bihar v. India
Singrauli coal field v. India
 sinnerite, in system Cu-As-S, 73-1569
Sintra v. Portugal
Sirt v. Libya
 sitaparite v. bixbyite
Skaggerak Coast v. Sweden
Skåne v. Sweden
 skarns, calcareous, experimental models of formation process, 73-1528; *Czechoslovakia*, genesis of grossular-almandine & grunerite-cummingtonite, 73-1793, min., 73-4311; *India*, in calc. granulite, 73-1018; *Japan*, facies of some Ca-Fe-Si, 73-1019; *magnessian, Russian SFSR*, at contact of muscovite, pegmatite & marble, 73-3149, prehnite-feldspar metasomatite in, 73-3150; *Sardinia*, from karst fillings, 73-3533; *Tasmania*, scheelite-bearing, origin, 73-3614
Skellefte v. Sweden
Skesar Hills v. Pakistan
 sklodowskite, *Katanga*, in Sorbonne collection, 73-3266
Skull Creek, Colorado v. USA
 skutterudite, *Czechoslovakia*, 73-771; *Ontario*, anal., 73-3554; *Poland*, in ore deposit, 73-3535
Skye, Inverness v. Scotland
Skyerholme, Yorkshire v. England
 slags, metallurgical, XRF procedures, 73-2286
Slate Creek, Nye County, Nevada v. USA
 slates, preparation of ultra-thin rock sections for EM, 73-41; *India*, albitized, 73-3151
 slavikite, *Argentina*, crystal structure & chem. formula, 73-3497
Slieve Gullion, Armagh v. Ireland
Småland v. Sweden
 smectites, Ag(I)-arene complexes, 73-175; aluminian, rapid hydrothermal crystallization, 73-3379; association with α -cristobalite, 73-186; experimental conversion of glauconite & illite to, 73-1231, properties, 73-1232; role of Mg in formation, 73-2317; surface layer characterization, 73-167; *Gulf of Guinea*, formation in sediments, 73-202; *Washington*, formations in alpine environment, 73-206
 —, beidellite, structural imperfections, 73-3452; symmetry group of single flakelet, 73-1307
 —, hectorite, stretching frequencies of structural hydroxyls of, 73-108; thermal reactions of synthetic, 73-106
 —, montmorillonite, adsorption & reactions of nicotine, 73-3395; adsorption of EDTA, 73-3393; adsorption of surfactants, 73-163; alkyl-ammonium decomposition on surfaces, 73-159; benzidine reactions in frozen & dry states, 73-3390; Ca-Mg exchange, 73-119; changes in morphology in course of acid destruction, 73-3376; complexes with dioxane, morpholine and piperidine, 73-162; Cu, turbidity of suspension treated with methylene blue, 73-2322; Cu²⁺, reactions with fulvic acid, 73-3391; dehydration, 73-1606; effect of exchangeable cations on sorption of chlorophyllin, 73-158; ESR in, 73-1216; exchangeable cations and c.e.c., 73-143; fluor-, water adsorption, 73-1607; interaction between D⁺ & lattice OH groups, 73-140; IR spectra of lysine absorbed on cation-substituted, 73-161; irreversible collapse, 73-139; light scattering of, 73-2324; Na⁺, thermodynamics of exchange of n-alkylammonium ions on, 73-160; nitrogen sorption, 73-3393; octahedral isomorphous substitution, 73-3378; organo-, complexes, surface chem. of thermally decomposed, 73-171; relation of crystal-lattice configuration and swelling, 73-127; reorganization by dehydroxylation, 73-1305; sorption complexes, with ammonium organic cations, 73-2320; sorption of methylene blue, 73-2323; surface area, 73-130; thermal transformation in acid clays, 73-1229; thin layers of H₂O in, 73-1226; transference numbers of counter-ions in paste, 73-3374; -water systems, relation between swelling, H₂O properties & b-dimension, 73-128; variable charge, preparation and solvation properties of, 73-131; X-ray diffraction aspects, 73-2382; *Argentina*, chloritized, X-ray, chem. data, 73-3414; *Atlantic Ocean*, in aeolian dusts, 73-2088; *Egypt & England*, in bentonitic clays, 73-192; *Haute-Volta*, formation under different conditions, 73-1251; *Iceland*, formation in geothermal area, 73-1005; *India*, natural 17 Å, -organic complex, 73-3392; *Kansas*, DTA studies, 73-1218; *Mediterranean Sea*, destruction in sapropelic muds, 73-203; *Norway*, in Ag deposit, 73-1824; *Poland*, min. of clay, 73-1246, min., structure of clay in coal field, 73-1247; *Wyoming*, adsorption of n-alkanes, 73-1233
 —, nontronite, *Red Sea*, ferroan, formation, 73-187
 —, saponite, *Japan*, Fe-rich, in druse cavities of basalt, 73-702; *Ukraine*, Fe-rich, data, 73-1833
 Smithsonite, flotation, function of ANP as cation-collector, 73-3303; manometric determination, 73-4067; *Arizona*, specimens, 73-3247, 3248; *New Mexico*, 73-3253; *S. Dakota*, in mine dump, unreported, 73-3649
 Smythite, redefined, 73-2892; *Canada*, nickeliferous, 73-2891
Snake Range, Nevada v. USA
Snarum v. Norway
Sniesnik Range v. Poland
 Snow, in geochemical exploration, 73-2308; *Antarctica*, chemistry, 73-1725
Snow Lake, Manitoba v. Canada
Sabotka, Lower Silesia v. Poland
Socorro County, New Mexico v. USA
 Sodalite, S containing type, synthesis, 73-444
 Soda-melilitite, variations of Si-O distances, 73-2361
 Sodium, AAS analytical scheme, 73-48; determination in silicate standards by XRF, 73-2285
 — compounds, chloride, density of H₂O solutions, 73-2562; metasilicate, variation of Si-O distances, 73-2361; nitrate, crystallization on carbonates, 73-1575, nitrate, crystal structure, 73-2413; Na₂.SiO₂.6H₂O, crystal structure, 73-2399
Sofala, N.S.W. v. Australia
Soghan v. Iran
Sogn v. Norway
Sogndal v. Norway
 Soils, AAS determination of Hg, 73-1168; geochem. surveys, 73-3869; organic chemicals in, book, 73-1201; relations of structure to engineering behaviour, 73-1267, 1268; swelling characteristics of compacted expansive, 73-153; thick-surfaced brunizemic, min., 73-2076; *Australia*, in volcanic region, min., 73-3411; *Bangladesh*, red, phys. studies, 73-156; *Iran*, engineering, 73-1266; *Pakistan*, formation of analcite in, 73-3417, physical studies on red soils, 73-156; *Puerto Rico*, general pattern, 73-1261; *Quebec*, mobility of elems. in profiles, 73-1694; *Tasmania*, podzolic, role of humic acids in, 73-3838
 Soil mechanics on alluvial ground, 73-1269
Sokhondo, Russian SFSR v. USSR
 Solar system, formation model, 73-1104; origin & secular rotation, geol. evidence, 73-2185
 Solid solutions, ideal formation, 73-1611
 Solid state chemistry, book, 73-96
 Solids, ionic conduction in, 73-3446
 Solution transfer, in sedimentary deformation, 73-2069
 SOMALIA, coast, Sr distribution in Recent sediments, 73-3830
Somerset v. England
Somerset I., N.W.T. v. Canada
Sondrio v. Italy
Sonoma County, California v. USA
Sonrai, Uttar Pradesh v. India
Sørfinnet v. Norway
Sør-Trøndelag v. Norway
Sørøy, Finnmark v. Norway
Soufrière, St. Vincent v. West Indies
 Sound, velocity in sediments, 73-4349
 SOUTH AFRICA, Fig Tree Group greywackes, RE elems. in, 73-3835; production of refractory Al silicates 73-3633; S. isotopes in Swaziland System baryte, 73-475; *Agulhas Bank, (offshore)*, early Tertiary volcanics, 73-873; *Barberton*, granite-greenstone terrain of shield areas, model, 73-4113, evolution of Onverwacht volcanic group, 73-884, greenstone belt as Archaean model, 73-842, ore deposits related to mafic & ultramafic magma, 73-3523, silicate immiscibility in basaltic komatiite, 73-2033, *Bon Accord*, trevorite redescribed, 73-1905; *Benfountein*, kimberlite, magmatic sedimentation & carbonatitic differentiation, 73-1990; *Bulfontein*, magnesian ilmenite from kimberlite, 73-1909; *Bushveld complex*, absence of

SOUTH AFRICA, (contd.)

shock-metamorphic effects, 73-4192; chrome spinels, interdependence of phys. & chem. properties, 73-4041; Critical Series, compositional variation of plagioclases, 73-717; geol. of western part, 73-883; olivine-apatite magnetitites in Villa Nora occurrence, 73-878; sulphides in layered sequence, 73-756; ultramafic pegmatoid, origin, 73-877; unusual Ti-Cr spinels, 73-4039; *east*, compositions of some coexisting phases, 73-881; *Magnet Heights*, geol., 73-876; *Potgietersrus area*, structure, petrol. of mafic rocks, 73-882; *Stoffberg area*, structural features and petrol., 73-879; *Finsch pipe*, garnets related to diamonds, 73-2805; *Herschel*, analcite in Karroo sediments, use as marker, 73-4033; *Kimberley*, review of diamond mining, 73-1087; *Lebombo Mts.*, distribution controls of layered & differentiated mafic intrusions, 73-875; *Limpopo orogenic belt*, northern margin, interpretation, 73-2138; *Natal*, *Mapumulo*, granitic rocks in Basement complex, 73-4148; *North West Cape & Transvaal*, comparison of crocidolite, 73-680; *Prieska*, tiger eye quartz, 73-2643; *Transvaal*, *Driekop mine*, variations in hollingworthite-irarsite group, 73-2907; *Roberts Victor mine*, eclogite & peridotite inclusions, geochem., petrogenesis, 73-1671, eclogites, petrol., chem., 73-2031; O isotope ratios in eclogites from kimberlite, 73-519; sulphides in eclogite nodules, 73-4083; *Rustenberg*, *Swartklip*, petrol. of Merensky Reef & associated rocks, 73-880; *Vredefort Dome*, petrog., 73-4149, pseudotachylite, origin, 73-2976; *Vredefort Ring*, origin of structure, palaeomagnetic evidence, 73-2032; *Wesselton*, magnesian ilmenite from kimberlite, 73-1909; *Witwatersrand*, determination of Mo in materials from processing U ores, 73-1163

South Australia v. *Australia*
South Cariboo, B.C. v. *Canada*
South Carolina v. *USA*

SOUTH CHINA SEA, geochem. studies of water, 73-1707

South Crofty, *Cornwall* v. *England*
South Dakota v. *USA*
South Island v. *New Zealand*
South Mimms, *Hertfordshire* v. *England*
South Neptune I., *S. Australia* v. *Australia*
South Platte, *Colorado* v. *USA*
South Qôroq v. *Greenland*
South Uist, *Inverness* v. *Scotland*

SOUTH VIETNAM, *Mekong delta*, clay soils, 73-209

SOUTH WEST AFRICA (Namibia), calcretes; formation, 73-4262; organic microspheres in Precambrian, 73-1688; *Damara*, talc & tremolite in metamorphic calcite-dolomite sediments, 73-3740; *Swakopmund*, primary anhydrite in Precambrian gneisses, 73-777; *Tsumeb*, briartite, 73-4058, new mineral, brunogeierite, 73-805

Southern Uplands v. *Scotland*
Soxhlet extraction, use of mixed solvents in, 73-2276

SPAIN, *south-east*, plurifacial metamorphism, 73-3169; *Aguilas*, galena in black schists, 73-2662; *Almadén*, Hg mine, diagenetic pyrite & sulphides, 73-2299; *Almeria*, almandine in biotite dacite, chem. anal., 73-1789; *Ambasaguas*, pyrite, (210) cleavage, 73-343; *Galicia*, mineralized sedimentary carbonates with Sb, 73-3529; *Jaén*, clay min. of Wealden sediments, 73-1241; *Madrid*, magnesite deposit,

X-ray, DTA, TGA, chem., 73-1919; *Málaga*, *La Gallega*, Ni-arsenides, Ni-rich löllingite and (Fe, Co)-rich gersdorffite, 73-770; *La Gallega & Los Jarales*, chromites in unusual paragenesis, microprobe anal., 73-4038; *Los Jarales*, maucherite in chromite-nicolcolite rocks, 73-770; *Rodalquilar*, Au mineralization, 73-1415; *Santander*, reef facies, dolomitization & mineralization, 73-251; *Picos de Europa*, sphalerite, experimental deformation, 73-3712; *Sierra de Carrascoy*, geol., 73-3170; *Sierra de los Filabres*, polyphase deformation, 73-3171; *Sierra Nevada*, garnets, composition & metamorphic grade, 73-1790; *Vigo*, *La Guía*, nigerite in riebeckite gneiss, 73-2813

Spargoville, *W. Australia* v. *Australia*

Spectral analysis, of RE mins., 73-1167

Spencer, *Idaho* v. *USA*

Sperryllite, *Bushveld complex*, 73-756

Spessartine v. garnet

Spessartite, *New Mexico*, differentiation trends in dykes, 73-2007

Sphalerite, geothermometry & geobarometry, 73-1555; hydrothermal synthesis, 73-379; ion-exchange properties, 73-2583; lithostratigraphic controls, 73-2299; microscopic impurity inclusions, 73-1882; Mössbauer parameters for Fe(II) in, 73-3483; noncolloidal origin of colloform textures, 73-1361, 1362; orientation & growth of skeletal crystals in chalcopryrite, 73-1880; paragenesis with chalcopryrite & galena, 73-4055; recrystallization softening & hardening, 73-2564; reflectivity & Fe-content, 73-4345; solid solution series with stannite, 73-3711; -wurtzite equilibria & stoichiometry, 73-1554; *Bushveld Igneous complex*, 73-756; *E. Africa*, suspended in resin globules in lake, 73-499; *France*, & coexisting pyrrhotite, EM study 73-1881; *Hungary*, Fe-distribution in grains, 73-761; *India*, geochem., 73-4057; *Italy*, microstructures, reflectivity, microhardness, 73-1879; *Ontario*, concretions, origin, 73-2663; *Quebec*, in Cu deposit, EM anal., 73-2895; *S. Dakota*, in mine dump, unreported, 73-3649; *Spain*, experimental deformation, 73-3712; *Tennessee*, ore controls & sedimentary features, 73-1390; *Yugoslavia*, specimens, 73-4362

Sphalerite, -pyrrhotite-pyrite solvus, 73-1556

Sphene, crystal chemistry, 73-656; fission track annealing, 73-341; *Czechoslovakia*, Al, F-rich metamict, data, 73-2803; *Italy*, green-yellow, 73-4309; *Quebec*, 73-1094; *Spillite*, *Austria*, petrogenesis, 73-4144; *Brittany*, new anal., 73-863

Spillite, -keratophyre terrains, petrol. investigation difficulties, 73-4120; *Devon*, differentiation & metasomatism, 73-1977; *France*, petrogenesis, 73-864

Spinels, classification in ultrabasic rocks, 73-1898; crystal growth, 73-1535; effect of composition, quantity & synthesis T, properties of periclase-spinel compositions, 73-368; equilibrium order-disorder, 73-366; exsolution in ilmenite, 73-741; formation by heating hematite in air & water vapour, 73-3696; in system MgO-Al₂O₃, aspects of solid state reaction, 73-1538, rate of formation, 73-1537; kenotetrahedral structure type, Madelung numbers, 73-2408; lunar, compositional variation, 73-582, EM anal., 73-2770, subsolidus reduction, 73-584; Mg-Al, hydrothermal dissolution reactions in

alkaline solution, 73-367; MgAl₂O₄ lattice vibrations in, 73-2404; Mn-Fe-orientation of segregated hematite phase, 73-1540; -olivine transformation, pressure, dependence, 73-1501; orbital ionization energies for Mg, 73-1280; pink, in lunar microbreccia, 73-583; role of O in formation from MgO & Al₂O₃, 73-3694; series MgCr₂O₄-MgFe₂O₄, equilibrium studies, 73-365; sintering & grain-growth kinetics, 73-1536; *Adirondacks*, inclusion in plagioclase of metagabbros, 73-1896; *British Columbia*, two-phase Cr-bearing, 73-2878; *Bushveld complex*, chrome interdependence of phys. & chem. properties, 73-4041, unusual Ti-Cr varieties, 73-4039; *Czechoslovakia*, zinc, data, 73-1902; *New South Wales*, plagioclase intergrowths, 73-2859; *Newfoundland*, from oxidised ore dump, with new cuprospinell, 73-2941; *Russian SFSSR*, Cr-rich, in sulphide-cassiterite deposits, EM anal., 73-2879

Spiro Sand, *Oklahoma* v. *USA*

Spitzbergen v. *Norway*

Spodumene v. pyroxene

Spurrite, associated with calcite, determination by DTA, 73-2265

Square Butte, *Montana* v. *USA*

SRI-LANKA, evolution of granulites & subdivision of granulite facies, 73-3186; graphite deposits, origin, 73-3540; origin of gem deposits, 73-2635; *west coast*, beach rock, petrog., 73-4259; *Hatton*, hornblende-garnet granulites, 73-1047; *Ratnapura*, natural boehmite single crystals, 73-2884

Srirangapatam, *Mysore* v. *India*

Staffordshire v. *England*

Standard rocks, chem. anal., 73-579; silicate, review, 73-1735; spectroscopic determination of F in, 73-79; U, Th, P concentrations in 3 silicate rocks, 73-2740; U.S.G.S., critical study of published analytical data, 73-574

Stannite, Mössbauer parameters, 73-3483; phase relations with chalcopryrite, 73-3710; solid solution series with sphalerite, 73-3711; *Peru*, Zn-bearing, intergrowth with tennantite, 73-406, -kesterite exsolution, *British Columbia*, 73-2897

Stardust, 73-3260

Staré Ransko, *Bohemia* v. *Czechoslovakia*

Staré Sedlo v. *Czechoslovakia*

Stassfurt v. *Germany*

Staurolite, boundaries of metamorphic subfacies, 73-1587; stability & related paragenesis, 73-406; *Austrian Alps*, occurrences, paragenesis with chloritoid, 73-3991; *India*, growth stages related to deformation, 73-942

Stavanger v. *Norway*

Stavelot, *Ardennes* v. *Belgium*

Steep Rock Lake, *Ontario* v. *Canada*

Steiermark v. *Austria*

Steigerite, effect of hydrate-solvate layers & exchangeable cations on crystal lattice parameters, 73-755

Stekenjokk v. *Sweden*

Stellerite, *Sardinia*, data, 73-4034

Stellanite, crystal structure, 73-1332

Stereographic projection of crystals, book, 73-3362

Sternbergite, Mössbauer parameters for Fe(II)-Fe(III), 73-3483

Sterling Hill, *New Jersey* v. *USA*

Stevenson Bennett mine, *New Mexico* v. *USA*

Stewartite, magnified photographs of crystals, 73-1203

- stibiconite, *Manitoba*, from alteration of almonotite, 73-2900
- stibiopalladinite, revised formula, 73-2946
- stibiopalladinite, domain structure, 73-2418
- stibnite, crystal structure, 73-1335; micro-hardness values, 73-2903; stability, 73-3713; *Manitoba*, arsenian, replacing almonotite, 73-2900; *Pakistan*, circular thin-layer chromatography in qualitative anal., 73-3341
- stichtite, *Tasmania*, 73-1091
- tilbite, magnified photographs of crystals, 73-1203; *Utah*, occurrence, IR anal., 73-4035
- Stillwater, *Montana v. USA*
- tilpinomelane, phys. properties, chem. composition, 73-2847; *Germany*, with ilvaite in hydrothermal paragenesis, EM anal., 73-1837
- stirlingshire v. *Scotland*
- stishovite, elastic-wave velocities, 73-2156
- stishovite v. *Norway*
- stjofberg, *Bushveld complex v. S. Africa*
- stone resources, *Maryland*, 73-3572
- storelv gabbro, *Sorøy v. Norway*
- tottite group minerals, summary, 73-2949
- train in the Earth, book, 73-3357
- train in rocks, patterns & magnitudes, 73-4092
- traits of Gibraltar v. *Mediterranean*
- trawngways Range, *Northern Territory v. Australia*
- trathcona Mine, *Sudbury, Ontario v. Canada*
- trigraph, correlation on chem. data, 73-3870; nomenclature, 73-4378
- tromatolites, *Lake Superior*, depositional environment, 73-3821
- tromeyerite, *California*, 73-3584; *Poland*, cuproan, in ores, 73-3535
- tronitanite, dissociation, 73-2922; manometric determination, 73-4067; *United Kingdom*, resources, 73-3626
- trontium, AAS & flame emission spectroscopy analytical scheme, 73-49; determination in silicates, 73-44; distribution in fenites, form of occurrence in calcite, 73-489; in brines, 73-3626; NAA determination in rocks and sediments, 73-75; in oolitic limestones, 73-2700; partitioning between Ca-carbonates & sulphates, 73-2576; *Austria*, in Devonian limestone, 73-1685; *B. Columbia*, content of rocks of batholith, 73-1666; *Italy*, in ignimbrites, 73-1675
- compounds, SrCO_3 solubility in H_2O 73-390; $\text{Sr}_3(\text{PO}_4)_3\text{OH}$, crystal structure, 73-2429; SrSO_4 , crystal growth, 73-333
- isotopes, as age test for weathering profiles, 73-541; in Apollo 12 samples, 73-3918; *Antarctica*, in salts from lakes & soils, 73-524, in ultramafic nodules & host basalt, 73-516, in volcanic rocks, 73-2684, 2685; *Pacific Ocean*, basalts, 73-1674
- structural lineaments, *Canada*, relation to min. occurrences, 73-845
- strukturbericht, errata in, 73-210
- struvite, & prebiotic phosphorylation, 73-3852; crystal structure, 73-2434; growth zoning in bladder stone, 73-2932; single bonded rotating NH_4^+ ion in, 73-2435; *California*, in diatomite beds, 73-4069
- Styria v. *Austria*
- Strzegom, *Lower Silesia v. Poland*
- Strzelin, *Lower Silesia v. Poland*
- subsidence, natural & mining, 73-2187
- SUDAN REPUBLIC, significance of faulting & Tertiary-Recent volcanism, 73-2054; *Dar-*
- fur Province, Zalingei & Jebel Marra* areas, geology, 73-830; *Gebeit gold mine*, geol., 73-3600; *Halfa district, Third Cataract*, geol., 73-4110; *Kassala district*, hydrogeol., 73-4111; *Northern Province, Berber*, geology, 73-828; *Tagabo Hills*, geology of Sheet 54-F, 73-829
- Sudbury, *Ontario v. Canada*
- Sudetes v. *Poland*
- Sugarloaf Key, *Florida v. USA*
- Suishoyama, *Fukushima v. Japan*
- Sukinda, *Orissa v. India*
- Sulitjelma v. *Norway*
- Sulphates, *Ural Mts.*, mineralization in pyrite deposits, 73-265
- Sulphate-bearing formations, S content, 73-1644
- Sulphate ions, titration in mineral & sea water, 73-3339
- Sulphide deposits, geochem., 73-1634; massive, formation at sites of sea floor spreading, 73-242; massive, origin, 73-1453; massive strata-bound, review, 73-2461; Precambrian Cu conglomerate, 73-1431; primary genesis, 73-1344; secondary alteration, 73-380; tectonic transport, 73-2459; *Alaska*, Cu & Zn bearing, 73-1382; *Arizona*, geol., 73-3621; *Canada*, Precambrian volcanogenic, review, 73-1383; *Hungary*, Pt content, 73-498; *Italy*, min., 73-2495; *New Brunswick*, 73-3567; deformation, 73-3616, origin, S isotope data, 73-2484; *Quebec*, min., 73-1874; *Queensland*, thermal metamorphism, 73-3610; *Russian SFSR*, in secondary S-bearing quartzite, 73-1381, use of finely divided Au in assaying, 73-1430, vertical mineralization, age, 73-264; *Sweden*, "ball ores" & pebble dykes, 73-2467, origin, 73-3526; *Vermont*, geol., 73-1454
- mineralization, & syngenetic dolomitization, 73-2299; *India*, 73-1434, discussion, 73-1439; *New Zealand*, Ni-Cu, 73-1997; *Norway*, & wall-rock alteration, 73-1410; *Shetland Is.*, associated with tuffites, 73-2965
- minerals, bacterial oxidation of Ge-bearing, 73-1631; CdS , PbS , SnS_2 , monoclinic Ag_2S , crystal growth, 73-335; coexisting, bond strength & S isotope fractionation, 73-1641, 1642; complex, of As, Sb, Bi, crystallochem., 73-1333; Cu_{1-83}S , natural hexagonal, first occurrence, 73-4084; determination of elemental S on surface, 73-1161; leaching of, 73-1348; lead, dislocation distributions in, 73-1565; magnetic transitions at high P, 73-2557; new, $(\text{Fe}, \text{Ni})_9\text{S}_{11}$, 73-4083; phase changes in Cu_2S as a function of T, 73-96; phases on pseudobinary join $\text{PbS}-\text{Sb}_2\text{S}_3$, 73-3708; PbS , lamellar dendritic growth in crystals, 73-325; preparation & props. of CuFeS_{2-x} & $\text{Cu}_{1-x}\text{Fe}_{1+x}\text{S}_{2-y}$, 73-96; reaction with thiol compounds, 73-340; sedimentary formation, 73-521; with four-coordinated iron, Mössbauer spectroscopy & bonding, 73-3483; ZnS, epitaxial growth on sapphire, 73-329, hollow single crystals, 73-328; *Bushveld Igneous complex*, disseminated, 73-756; *California*, minor elem. content, 73-1632; *India*, Cu-Fe phase, 73-1878, structures, 73-1875; *Kazakhstan & Russian SFSR*, new Bi-bearing phases of Ag, Cu, Pb, 73-1945; *Ontario*, in Ag-Sb deposits, 73-3556, S isotopes in, 73-3563; *Peru*, assemblage, 73-4061, X-ray amorphous, 73-2906; *Russian SFSR*, formation from hot spring, 73-1717, in ultramafic in-
- clusions, 73-2664; *Tasmania*, Se content, 73-3764;
- ores, flotation in sea-water, 73-3525; on-stream XRF, 73-282
- Sulphosalts, new, $\text{Pb}_{11}\text{As}_8\text{S}_{31}$, 73-2906; ore mins., thermochem. data, 73-3671
- Sulphur, Claus process for recovery of, 73-1369; determination of elemental S on surface of sulphide minerals, 73-1161; determination, use of automatic titrator, 73-2270; elemental from recent sediments, 73-2693; geochem. cycle & micro-organisms, 73-476; in sulphate-bearing formations, 73-1644; natural cycle, 73-2654; orthorhombic, constrained refinement, 73-2400; rapid determination, 73-62, in rocks, 73-1160; role in ore-forming solutions, 73-1640; valency in basaltic glass, 73-1673; *California*, crystals, 73-1100; *India*, native, in Pb-Zn belt, 73-4366; *New England*, atmospheric, effect on chem. weathering, 73-558
- isotopes, Apollo 12 samples, 73-3913; fractionation effects in bacterial reduction processes, model, 73-3754; geochem. of volcanic & fumarolic fluids, 73-1718; systematics in hydrothermal ore deposits, 73-3767; *Alaska*, in Cu deposit, 73-1452; *India*, in Cu deposit, 73-3770, study of pyrite deposit, 73-494; *Ireland*, in base metal mines, 73-1629; *Italy*, abundances in alunite deposits, 73-496; *Michigan*, in Cu deposit, 73-3769; *Mississippi valley*, fractionation during ore deposition, 73-3774; *Ontario*, in sulphides of ore deposit, 73-3563; *S. Africa*, in sedimentary baryte, 73-475; *S. Australia*, in Cu deposit, 73-3771; *Tennessee*, in sulphide lenses, 73-3768; *W. Germany*, in Pb-Zn deposit, 73-3772; *Wyoming*, in hot springs, 73-550, in roll-type U deposit, 73-3778; *Yorkshire*, in galena, 73-493; *Yukon*, in Pb-Zn-Ag-Cd deposits, 73-1636, 1637
- Sunglitz, *Russian SFSR*, from peridotite residuum, 73-2844
- Surat Basin, *Queensland v. Australia*
- Surrey v. *England*
- Sutherland v. *Scotland*
- Swakopmund v. *S.W. Africa*
- Swartklip, *Rustenberg, v. S. Africa*
- Swat v. *Pakistan*
- Swierzawa, *Sudetes v. Poland*
- Swietozyskie Mts. v. *Poland*
- Synnyr, *Cisbaikalia, Russian SFSR v. USSR*
- SWEDEN, age of volcanic ash units in peat bogs, 73-2193; sulphidic "ball ores", 73-467; central, sedimentary Fe ores & sulphide ores, origin, 73-3526, titanomagnetite orebody, elem. distribution among silicates & oxides, 73-2657; north, Rb-Sr ages of extrusive & intrusive rocks, 73-2189, granite & syenite, 73-2189; *Falun*, almandine, magnetic structure, oxygen parameters, 73-217, magnetic field at nucleus, electrical field gradient, 73-218; *Grängeberg*, Sn & tr. elems. in ore, 73-2658; *Jämtland*, K-feldspars in granites, X-ray obliquity, 73-2851; *Kyrkviken*, Cl content of clays & palaeosalinity, 73-2692; *Kopparberg County*, magnetic anomaly, 73-2957; *Långban*, quenselite, crystal structure, 73-236; *Linköping*, age relations & rocks of Svecofennian-Gothian boundary, 73-2961; *Scania*, clay min. of tills, 73-2336; *Skaggerak coast*, relation of Permian dolerite & rhomb porphyry dykes, 73-3018; *Skåne*, alkaline olivine basalt, age, 73-2192; *Skellefte*, geol., 73-3017; *Småland*, por-

SWEDEN, (contd.)

phyry, age, 73-2191; *Stekenjokk*, structure of ore bodies, 73-1413; *Täsjö Lake*, Caledonian geol., U-bearing strata, 73-2960; *Västervik*, evolution of fleck gneisses, 73-3159, metamorphism & migmatization, 73-3160, migmatite genesis, 73-3161, metabasic rock types, evolution, 73-2962; *Vättern*, gravity anomalies, geol., 73-2963

SWITZERLAND, Hg in lake sediments, 73-1681; list of first min. descriptions, 73-4364; Lower Permian rocks, 73-978; minerals, book, 73-3366; *north-east*, molasse, clay min., 73-1240; *Alps*, K/Ar ages of fissure mins., 73-3284, U prospecting, Re elem., Be, Bi, Mo, Au content of rocks, 73-3531, *Aiguilles Rouges*, metasomatic granitization of ophiolites, 73-4187; *Bergell massif*, age, 73-3282, cordierite, triplet at contact, 73-4360; *Binnal*, meta-torbernite in granitic gneisses, 73-4363; *Camperio-Campo Benio area*, mins., occurrences, 73-4365; *Glarus Alps*, metamorphism of glauconitic rocks, 73-3173; *Gothard massif*, gneiss, 73-2125; *Graubünden*, historic building stones, 73-3631, *Calanda*, scheelite, 73-2179; *Grimmel*, new mineral, grimselite, 73-806; *Grisons*, Rb/Sr ages in minerals from Alpine clefts, 73-1121, *Oberhalbstein*, fissured zones of serpentinite, min., 73-1801, *Truns*, twinning in quartz, 73-1851; *Lake Geneva*, Hg in sediments, 73-1680; *Lauterbrunner*, migmatite complex, petrol., 73-4104; *Lucerne*, Au in recent alluvials, 73-3532; *Lugano, Lanzo*, partial fusion in lherzolite, 73-825; *Nufenen Pass*, Bündnerschiefer series, geol., 73-1013; *St. Gotthard, Piz Lucendro*, aeschynite on adularia, 73-746; *Val Nalps & Val Curnera*, min. excursion, 73-2180; *Valais*, radioactivity measurements, 73-1955, *Allalin gabbro*, high-P parageneses, 73-4308; *Geisspfad*, ultramafic complex, min., petrog., 73-2124

Sydney Basin, N.S.W. v. Australia

Syenite, *Austria*, micro-, with brown hornblende, chem., min., 73-867; *India*, geol., chem. anal., 73-3039, petrog., 73-893; *Maine*, melting relations, 73-3684; *New Jersey*, nepheline confirmed in, 73-917; *Norway*, relations with carbonatite, 73-2020; *Scotland*, comparative petrol., 73-1972; *Sweden*, age, 73-2190; *Vermont*, silica diffusion round intrusion, 73-4317

Sylvanite, Fiji, 73-3615

Sylvine, visible & near-IR spectra, 73-1066
Synchysite, in fossil bones, 73-2924

Syngenite, Antarctica, diagenetic, 73-778

Systems:

Ag-Bi-S, 73-3671
Ag-Sb-S, 73-1891, 3671
AgSbS₂-PbS, 73-1563
Al₂O₃-Cr₂O₃, 73-362
Al₂O₃-Cr₂O₃-SiO₂, 73-363
Al₂O₃-SiO₂-Fe₂O₃-H₂O, 73-348, 349
Au-Ni-Pt, 73-3693
BaCO₃-SiO₂, 73-346
(Ba,Pb)(SO₄CrO₄), 73-2578
BaSO₄-CaSO₄, 73-1571
Ba[SO₄·(BF₄)₂], 73-2578
(Ba,Sr)(SO₄CrO₄), 73-2578
BeO-SnO₂-Cr₂O₃, 73-1539
3CaCO₃-Fe₂O₃-3SiO₂, 73-1583
CaCO₃-MgCO₃, 73-3363
Ca₂Fe₂-Al₂O₅, magnetic structures in, 73-2403
CaO-Al₂O₃-SiO₂, 73-440, 441

CaO-Al₂O₃-SiO₂-H₂O, 73-1610
CaO-MgO-Al₂O₃-SiO₂, 73-443, 2607
CaO-MgO-SiO₂-C-O-H, 73-2575
CaO-MgO-Al₂O₃-SiO₂-CO₂-H₂O, 73-3685
CaO-MgO-Al₂O₃-SiO₂-Fe-O₂, 73-410
CaO-MgO-B₂O₃-H₂O, 73-3699
CaO-MgO-SiO₂-CO₂, 73-1588
CaO-MgO-SiO₂-CO₂-H₂O, 73-2127
CaO-Nb₂O₅-TiO₂-SiO₂, 73-400, 401
CaO-SnO₃-Cr₂O₃, 73-1539
CaSO₄-H₂O, 73-3714
CaSO₄-NaCl-H₂O, 73-3714
β-2CaO·SiO₂-H₂O, 73-3670
3CaO·SiO₂-H₂O, 73-3670
CaSiO₃-FeSiO₃-MgSiO₃, 73-1594
CoO-MgO-GeO₂, 73-2549
CoO-ZnO-GeO₂, 73-2550
CsCl-NaCl, 73-2601
Cu-As-S, 73-1569
Cu-Bi-S, 73-3671
Cu-Fe-S, 73-1568, 1878
Cu₂FeSnS₄-Cu₂ZnSnS₄, 73-2588
Cu-S, 73-1562
Cu₂S-Sb₂S₃, 73-2591
Cu-Sb-S, 73-3705, 3709
Cu-Zn-S, 73-3707
Cu₂S-Sb₂S₃, 73-1563
Fe-Co-Cu-S, 73-757
Fe-Ni-S, 73-1874
Fe-Zn-S, 73-1881
FeO-Fe₂O₃-TiO₂, 73-370, 1533
FeO-SiO₂-TiO₂, 73-97
FeS-S, 73-2585
Hg-Te, 73-1532
KAlSi₃O₈-KAlSiO₄-Al₂O₃-Fe-O-H, 73-2613
K₂O-Al₂O₃-SiO₂-H₂O, 73-423, 1602
K₂O-MgO-FeO-Al₂O₃-SiO₂, 73-3996
Li₄SiO₄-Mg₂SiO₄-Zn₂SiO₄-SiO₂, 73-1581
Mg-Fe-O-SiO₂, 73-3727
MgF₂-MgO-H₂O, 73-392
MgO-Al₂O₃, 73-1537, 1538
MgO-Al₂O₃-SiO₂, 73-412
MgO-Al₂O₃-SiO₂-H₂O, 73-1802
MgO-CaO-Na₂O-Al₂O₃-SiO₂-H₂O, 73-353
MgO-Cr₂O₃-Fe₂O₃, 73-364
MgO-FeO-Al₂O₃-SiO₂, 73-402
MgO-FeO-Fe₂O₃-TiO₂, 73-1534
MgO-Fe₂O₃, 73-3695
MgO-Mg(Al_{1-x}Cr_x)₂O₄, 73-368
MgO-MgCr₂O₄-Ca₂SiO₄, 73-3728
MgO-SiO₂-H₂O-CO₂, 73-424, 2598
MgO-SiO₂-H₂O-MgCl₂, 73-1523
MgO-SnO-Cr₂O₃, 73-1539
MgO-TiO₂, 73, 3698
Mg₃Si₄O₁₀(OH)₂-Fe₃Si₄O₁₀(OH)₂, 73-1605
NaAlO₂-SiO₂-H₂O, 73-3669
NaAlSi₃O₈-BaAlSi₂O₈-H₂O, 73-434
NaAlSi₃O₈-KAlSi₃O₈-SiO₂-H₂O, 73-1616
NaAlSi₃O₈-NaAlSiO₄-H₂O, 73-3750, 3751, 3752
NaAlSi₃O₈-NaCl-H₂O, 73-1615
NaF-NaCl, 73-2601
NaFeSi₃O₈-NaAlSi₃O₈, 73-1596
Na₂O-Al₂O₃, 73-361
Na₂SO₄-NaF-NaCl, 73-2912
NiO-MgO-GeO₂, 73-2549
NiO-ZnO-GeO₂, 73-2550
Pb-Bi-S, 73-3671
Pb-Sb-S, 73-3671, 3706
PbCl₂-PbO-P₂O₅-H₂O, 73-3720
Se-Te-Hg, 73-1531
SiO₂-Al₂O₃-Fe₂O₃-FeO-MgO-CaO-Na₂O-K₂O-H₂O, 73-355
SiO₂-CaO-H₂O-CO₂, 73-351

SnO₂-Cr₂O₃, 73-1539
SnO₂-TiO₂, 73-359
Sr-Sb-S, 73-3671
ThGeO₄, phase stability, 73-2577
U-Th-Pb, 73-3897
Ab-Or-An-Q, 73-1972
almandine-sulphur-water, 73-2609
anorthite-diopside-akermanite, 73-308
calcite-gypsum-water, 73-3716
diopside-albite-anorthite, 73-309
diopside-forsterite-nepheline-albite-leucite, 73-3734
forsterite-diopside-akermanite-leucite, 73-1578
forsterite-diopside-silica, 73-1593, 3677
forsterite-monticellite, 73-3724
galena-oxygen-xanthate, 73-2556
galena-xanthate-oxygen, 73-339
pargasite-H₂O-CO₂, 73-3739
pyrite-ferroselite, 73-377
quartz-albite-orthoclase-water, 73-309
quartz-fayalite-leucite, 73-309
stannite-chalcopyrite, 73-3710
quinary reciprocal salt Na,K,Mg,Ca/ClSO₄, 73-1570
Szomolnokite, Iowa, in sulphate efflorescences, 73-2913

Tacharanite, Germany, metasomatic product, 73-1006

Tachyhydrite, Brazil, 73-2937

Tagabo Hills v. Sudan Republic

Tagus R. v. Portugal

TAIWAN, age of metamorphic rocks, 73-1127; clay min. formation from mafic & intermediate rocks, 73-1252; deformation lamella-bearing quartz veins in sand stones, 73-2091; limestone beds in schist stress orientation, 73-2144; magnetite & ilmenite from beach sand, 73-1907
petrochem. of Pliocene-Pleistocene volcanic rocks, 73-899; quartz fabrics & stress orientation in Tananao schist, 73-943
Chinkuashih mine, crystal forms of native Au & luzonite, 73-1867, Cu contents of soils, 73-1741, sericitic clay, 73-1249
Kungkuan tuff, composition & genesis of analcite, 73-1858; -Luzon region, dual trench structure, 73-1960

Takato, Ryōke v. Japan

Taku Inlet, Alaska v. USA

Talbot, W. Australia v. Australia

Talc, Fe content, 73-1605; in reaction dolomite + quartz + water = talc + calcite + carbon dioxide, 73-1521; phase relations with tremolite in metamorphic calcite-dolomite sediments, 73-3740
stability, 73-2615; California, petrog. of deposits, 73-3658; Egypt, min. and ceramic props., 73-703; Maryland, crystal structure, 73-3467; Michigan, 73-1102; Pakistan, deposits, geol., 73-3640
DTA studies, 73-3639; S. Africa, origin of deposits, 73-3523

Talcum powders, commercial, asbestiform impurities in, 73-698

Talnakh, Russian SFSR v. USSR

Talnakhite, crystal structure, 73-3485
new compositional data, 73-1568

Tamil Nadu v. India

Tanco pegmatite, Bernic Lake, Manitoba v. Canada

Tantalite, Manitoba, opt., chem. data, 73-2888

Tantalum, XRF spectrometry determination, 73-3348; Central Asia, in granites & clays, 73-1665

TANZANIA, gem corundum occurrences 73-2634; gem quality zoisite, crystal

- TANZANIA, (contd.)**
 structure, 73-221; *northeast*, Mozambique orogenic belt & its foreland, photo-geology, 73-932; *Kibo*, anorthoclase, X-ray anal., 73-68; *Kilimanjaro*, geology, memoir, 73-1198, olivine & pyroxene relation in rocks, 73-3979; *Lashaine volcano*, alkali pyroxenite xenoliths, 73-3033
- Tapiolite, Manitoba**, EM anal., 73-2888
- Taramellite, California**, 73-4372
- Tarapaquite, crystal structure**, 73-2420
- Tarawera v. New Zealand**
- Tarbutite, S. Australia**, 73-3502
- Tarn Moor, Westmoreland v. England**
- Täsjö Lake v. Sweden**
- TASMAN SEA, Macquarie Ridge**, petrol. geochem. magnetic properties of dredged rocks, 73-1959
- Tasmania v. Australia**
- Tasmanite, Tasmania**, organic-rich rock, carboxylic acids derived from, 73-3816
- Tataria, Russian SFSR v. USSR**
- Tatra Mts. v. Czechoslovakia**
- Tauernfenster v. Austria**
- Taupo v. New Zealand**
- Taurus Mts. v. Turkey**
- Tagayon Peninsula, Russian SFSR v. USSR**
- Taylor Valley, Victoria Land v. Antarctica**
- Taymyr, Russian SFSR v. USSR**
- Tayvallich, Argyll v. Scotland**
- Tazewell County, Illinois v. USA**
- TCHAD, pedogenesis in tropical regions**, 73-2338; *Lake Tchad*, Fe-bearing oolites, & Fe sedimentation, 73-2299, *Andjia*, new min., kanemite in evaporites, 73-1938
- Te Aroha v. New Zealand**
- Tea Tree Gulch, S. Australia v. Australia**
- Tectonics, & andesitic magma**, 73-4176; deep fault, & magmatism & mineralization, 73-4105; related to evolution of granitic rocks, 73-4190; *Cambodia*, Quaternary, 73-3290
- effects, resulting from tidal friction between Earth & the Moon, 73-3256
- lineaments, *USSR*, on epi-Hercynian platform, 73-2975
- processes, role of lithothermal systems in, 73-4087
- settings, & magmatism, 73-1948
- Tektites**, book, 73-1207; from the Earth, 73-643; gas inclusions in moldavites, 73-1773; microtektites result of cometary impacts, 73-1771; moldavites, origin, geochem. evidence, 73-2797; origin, 73-2309; *Asia*, account & illustrations, 73-2796; *Bohemia*, penetration of two moldavites, 73-642; *Ivory Coast*, new data, 73-1770; *Pacific Ocean*, micro-, possible in deep sea clays, 73-2986
- Telemark v. Norway**
- Tellurium minerals & compounds**, $\text{Fe}_2\text{Te}_4\text{-O}_{11}$ crystal structure, 73-1336; $\text{Te}^{130}\text{-Xe}^{130}$ age determination, 73-3270; *Fiji*, vertical zoning of Au-Ag, 73-3615; *Quebec*, unidentified in Cu deposit, 73-2895; *W. Australia*, in goldfield, 73-276
- Temperature parameters, anisotropic, variances & covariances**, 73-1273
- Tengerite, composition**, 73-391
- Tennantite, in system Cu-As-S**, 73-1569; *California*, 73-3584; *Peru*, intergrowth with Zn-stannite, 73-4061; *Portugal*, Bi-, EM anal., reflectance, hardness, 73-4060; also v. binnite
- Tennantite-tetrahedrite, heterogeneity in single grains**, 73-1895; *Mexico*, microprobe anal., 73-764
- Tennessee v. USA**
- Tenorite, Tasmania**, 73-3613
- Tephra, orientation in "directional eruptions" of volcanoes**, 73-3087
- Terowie, S. Australia v. Australia**
- Terraced Hills, Nevada v. USA**
- Terrigenous sediments, nomenclature & classification**, 73-4223; recent marine, min., 73-4298
- Tertiary time scale**, 73-2209
- Teschacherite, New Zealand**, in geothermal well, 73-1921
- Teschenerite, Poland**, transformation of titanomagnetite in, 73-2877
- Tetradymite, Quebec**, in Cu deposit, EM anal., 73-2895; *Russian SFSR*, associated with josëite A & josëite B, 73-773; *Virginia*, 73-3246
- Tetrahedrite, composition & polymorphism in system Cu-Sb-S**, 73-3709; Mössbauer parameters for Fe(II) & Fe(III), 73-3483; penetration twins, 73-1279; *Austria*, mineralization, 73-1416; *California*, 73-3584, 4372; *Japan*, argentine, 73-768
- Tetrahedrite-tennantite series, heterogeneity in single grain**, 73-1895; *Mexico*, zoned min. EM anal., 73-764
- Tetrawickmanite, N. Carolina**, new mineral, 73-2949
- Texada I., B.C. v. Canada**
- Texas v. USA**
- Thalenite, Colorado**, from yttrifluorite, 73-662; *Russian SFSR*, crystal structure, 73-1295
- Thallium, AAS determination**, 73-2308; NAA determination in rocks, 73-77
- Tharad, Gujarat v. India**
- Thaumasite, USSR, Kuraminskiy Mts.**, occurrences, 73-1088; *Utah*, occurrence, IR anal., 73-4035; *Virginia*, 73-1095
- Thell Mts. v. Antarctica**
- Thenardite, Réunion I.**, in fumaroles, chem., DTA, IR, X-ray diff. data, 73-2910; *Uganda*, in lake sediment, 73-2925
- Thermal analysis, for investigating reaction kinetics in solid state**, 73-2263
- Thermochemical parameters of minerals, from O-buffered hydrothermal equilibrium data**, 73-2553
- Thermodynamic data, from inter-crystalline & intra-crystalline ion exchange**, 73-2552; guide to presentation & publication, 73-305
- Thiérache, Aisne v. France**
- Thin sections, of fine-grained rocks, undulose extinction**, 73-2243
- Third Cataract, Halfa v. Sudan Republic**
- Tholeiites, Antarctica**, petrog., 73-911; *Atlantic Ocean*, petrol., 73-4146; *Canada*, palaeomagnetism, petrol., 73-2999; *Germany*, origin & crystallization history, 73-3680; *India*, complex, over- & under-saturated differentiates, 73-4195; *Michigan*, degradation, metamorphic differentiation, 73-1007; *Newfoundland*, low K, 73-3078; *New South Wales*, low P fractionation, 73-4159; *Nigeria*, petrog., 73-3091; *Scotland*, geochem., 73-2022
- Thompson, Manitoba v. Canada**
- Thomsonite, New Jersey**, 73-4370; *Utah*, occurrence, IR anal., 73-4035
- Thorium, field determination by gamma-ray spectrometry**, 73-1188; migration in natural materials, 73-29; mobility in silicic volcanics, 73-1657; quantitative determination, 73-51; *Idaho*, deposits, 73-2535; *Virginia*, high in quartz monzonite, 73-288
- isotopes, in Apollo 12 samples, 73-3919, 3920
- Thor-Odin gneiss, B.C. v. Canada**
- Thorn Mountain Cave, W. Virginia v. USA**
- Thorveitite, crystal structure**, 73-2367
- Three-variable closed array, clustering of data points**, 73-2653
- Throckley, Northumberland v. England**
- Thulium, high-P polymorph, X-ray diffraction**, 73-3672
- Thunder Bay, Lake Superior, Ontario v. Canada**
- Thuringia v. Germany**
- TIBET, Mount Jolmo Lungma**, geol., tectonics, 73-4115
- Tien Shan, Kirghizian SSR v. USSR**
- Tieveragh, Antrim v. Ireland**
- Tigris R. v. Iraq**
- Tilasite, Arizona**, crystal structure, 73-2438
- Tills, N. America**, garnets in provenance studies, 73-4273
- Tillite, Antarctica**, sedimentology, 73-997
- Timan, Russian SFSR v. USSR**
- Tin, geochem. prospecting**, 73-3863; oscillographic determination in silicate rocks, 73-474; silicate-bound, determination in silicate rocks & differentiation from cassiterite, 73-3337; *Cornwall*, high concentration in stream sediments, 73-3527; *Norway*, in Nb-Ta min., 73-3764; *Tasmania*, in granites, geochem. evolution, 73-3766
- deposits, alluvial, evaluation, 73-3517; *Bolivia*, 73-289; *Burma*, review, 73-274; *Germany*, metallogenetic indicators, 73-2466; *Mongolia*, geochem., 73-2499; *New South Wales*, relation of structure & orebody type, 73-2506; *Portugal*, age, 73-5; *Rhodesia*, in pegmatites, geol., 73-3537; *Tasmania*, econ. geol., 73-1446
- minerals & compounds, new Cu-Sn alloy, $(\eta\text{-Cu}_6\text{Sn}_5)$, 73-811; sulphide, crystal growth, 73-335; tin(II) iodide, crystal structure, 73-3491; *Russian SFSR*, new solid solutions, (Pt,Pd) Sn_2 , (Pd,Pt) $(\text{Sn,Pb})_{21}$, 73-1944
- mineralization, localization of, 73-2470; *Tasmania*, associated granitic rock types, 73-3545; *USSR*, structure & distribution, 73-1377
- Tincalayu, Salta v. Argentina**
- Tintagel, Cornwall v. England**
- Tipperary v. Ireland**
- Tirah, Khyber Agency v. Pakistan**
- Tiree, Argyll v. Scotland**
- Tisovec v. Czechoslovakia**
- Titan-clinochumite, Italy**, crystal structure, 73-2362
- Titanite v. sphene**
- Titanium, as free oxide & substituted forms in soil minerals**, 73-145; in biotite in metamorphic facies, 73-483; isotopic abundance in lunar rocks, 73-3922; TiO_2 content distinction between alkaline & shoshonitic series, 73-817; rapid spectrophotometric determination in rocks, mins. & Ti ores, 73-1162; X-ray spectrographic anal. in silicate rocks, 73-66
- Titanium compounds, Fe-Ti oxides, effect of Mg on**, 73-1534; synthesis of Fe-Ti oxides under hydrothermal conditions, 73-370; Ti & Ti-Cr oxide systems & swinging shear planes, 73-96
- Titanohematite, S. Australia**, & other Fe-Ti oxides in complex, 73-2882
- Titanomagnetite, effect of Al & Mg impurities**, 73-1899; in shoshonitic association, chem., 73-672; zoned with chromite, 73-1901; *Poland*, transformation in teschenites, 73-2877; *S. Australia*, in complex & other Fe-Ti oxides, 73-2882
- Tobacco Root Mts., Montana v. USA**

- Tobermorite, *Utah*, 14 Å-, occurrence, IR anal., 73-4035
- Tochilinite, new mineral, 73-1943
- Todokorite, *France*, identification in karst deposits, 73-2885; *Mexico*, 73-2184
- Togo, hematite & U-Th-rutile deposits, 73-262
- Tokyo v. *Japan*
- Tolfa v. *Italy*
- Tombstone, *Nova Scotia v. Canada*
- Tonalite, *Peru*, in coastal batholith, 73-949, 950
- Tonga v. *Pacific Ocean*
- Tooele County, *Utah v. USA*
- Topaz, development of (120) prism faces, 73-2810; *Brazil*, origin of deposits, 73-1799, 2811, 2812; *California*, distribution in mining area, 73-4128; *Colorado*, in pegmatite, genesis, 73-919; *Queensland*, 73-2644
- Tobernite, *Gabon*, in Sorbonne collection, 73-3266; *Katanga*, in Sorbonne collection, 73-3266
- Torres Strait v. *Papua & New Guinea*
- Tortiva v. *Ivory Coast*
- Tourmaline, n.m.r. of ^1H , ^7Li , ^{11}B , ^{23}Na , ^{27}Al , 73-3457; pink & black, Mn^{3+} absorption, 73-2368; rare multiple indices on refractometer, 73-2638; Sn content, 73-3997; Ti, V, Cr, Mn, Fe contents, 73-3998; valuation principles, 73-466; *Bavaria*, enrichment in metamorphic sediments, 73-665; *California*, distribution in mining area, 73-4128; *Chile*, Cu-bearing breccia pipes, 73-1408, 1409, 3589; *Ghana*, in pegmatite, 73-1816; *Guyana*, in placers, 73-754; *Maine*, 73-4367
- , dravite, *Bohemia*, in Mn deposit, 73-2493; *Czechoslovakia*, chem., min., 73-666
- Trace elements, as estimators of ore-bearing potential of granites, 73-2308; determination by NAA in ruby laser crystals, 73-72; in geochem., quantitative anal. method, 73-2308; rapid determination in organic-rich soils by XRF, 73-2296; XRF determination in geochem. standards, 73-1736; *California*, in some plutonics of Sierra Nevada batholith, 73-1668; *India*, in Precambrian rocks & mins., 73-1627; *Mexico*, in obsidian, 73-572; *Oregon*, concentration in clays of volcanic ash soils, 73-176
- Trace metals, *India*, in crude oil, 73-559
- Trachyte, *Marquesas Is.*, in series with basalts & phonolites, 73-4172; *Scotland*, K-rich, 73-4137
- Tråk, *Bamble v. Norway*
- Tranquillityite, new anal., group of Zr-Ti-Fe oxides, 73-2950
- Transantarctic Mts. v. *Antarctica*
- Transbaikalian, *Russian SFSR v. USSR*
- Transcaucasia, *Russian SFSR v. USSR*
- Transvaal v. *S. Africa*
- Trap-rocks, *Kirghizian SSR*, association of sheet intrusions, volcanic rocks & dykes, 73-3030
- Trás-os-Montes v. *Portugal*
- Traversella v. *Italy*
- Travertine, *Czechoslovakia*, geochem., 73-1692
- Treadway, *Tennessee v. USA*
- Treasury mine, *Geneva, California v. USA*
- Třebíč v. *Czechoslovakia*
- Tremolite v. amphibole
- Trepča v. *Yugoslavia*
- Trevorite, *S. Africa*, redescribed, 73-1905
- Tridymite, hydrothermal recrystallization and transformation, 73-438; lunar, EM anal., 73-1744; structure type in SiO_2 glass, 73-2390; X-ray quantitative determination in silica refractories, 73-1155
- Trinidad v. *West Indies*
- Trinity Alps, *California v. USA*
- Trinity County, *California v. USA*
- Triphylite, *Maine*, 73-4367
- Triphylite-lithiophilite, *S. Dakota*, 73-2538
- Triplite, Mössbauer studies, 73-1339
- Triploidite, Mössbauer studies, 73-1339
- Troctolite, spinel-, lunar, 73-2757
- Troilite, distinction from pyrrhotite, 73-4050
- Trojan, *S. Dakota v. USA*
- Trolleite, *Rwanda*, chem. anal., X-ray powder data, 73-1925
- Troms v. *Norway*
- Trona-leonardite mixtures, possible economic use, 73-2528
- Trondelag v. *Norway*
- Trondhemite, *Queensland*, in hornfels, 73-3152
- Troodos complex v. *Cyprus*
- Trstenik v. *Yugoslavia*
- TRUCIAL STATES, Abu Khabi, evaporite deposition & geochem. of coexisting brines, 73-3851
- Truns, *Grisons v. Switzerland*
- Truro, *S. Australia v. Australia*
- Truscottite, dehydration reaction, 73-416
- Tschah Khuni mine, *Anarak v. Iran*
- Tsuboi, Prof. Seitarō, sketch of his work, 73-94
- Tsumeb v. *S.W. Africa*
- Tsushima I. v. *Japan*
- Tufa, *India*, resources, 73-3645
- Tuffs, *Brittany*, new anal., 73-863; *Scotland*, indurated mafic intrusive, 73-3081; *Uganda*, geol., 73-959; *USA*, correlated by biotites, 73-2005
- Tuffsite, *Shetland Is.*, breccias & associated carbonate-sulphide mineralization, 73-2965
- Tugtupite, transparent, 73-460
- Tui, *Te Aroha v. New Zealand*
- Tulare County, *California v. USA*
- Tumut, *N.S.W. v. Australia*
- Tunbridge Wells, *Kent v. England*
- Tunellite, *California*, 73-3251
- Tungstates, ABO_4 , accurate cell dimensions, 73-2421
- Tungsten, colorimetric determination by zinc dithiol, 73-3333; determination by spectrophotometry, 73-2271; world & UK reserves, 73-3506; *Montana*, mining, 73-1401
- deposits, types, exploration, finds, 73-3507; *Burma*, review, 73-274; *Portugal*, age, 73-5; *Utah*, 73-2511
- mineralization, *British Columbia*, age, 73-2228; *South Dakota*, 73-3569; *USSR*, structure & distribution, 73-1377
- Tungstenite-molybdenite series, *Austria*, as inclusions in scheelite, 73-4062
- TUNISIA, north, hydrothermal metamorphism in saliferous formations, 73-3147; *Djebel el Kohol*, blue fluorite, cause of colour, 73-2936; *Djebel Hallouf*, galena & jordanite stalactites, 73-260; *Sebkh el Melah*, Recent polyhalite, 73-780
- Tunk Lake, *Maine v. USA*
- Turanian platform v. *USSR*
- Turbidites, *Pacific Ocean*, significance, 73-2992
- Turek v. *Poland*
- Turgay Trough, *Kazakhstan v. USSR*
- Turkana v. *Kenya*
- TURKEY, boron mins. distribution, 73-303; goethite in Fe ores, EM examination of morphology, 73-753; *Anatolia*, *Erciyes*, volcanic series, 73-4211; *Ergani-Maden* area, massive sulphide Cu deposits, 73-3594; *Eskishehir*, new borate district, 73-302; *Samli*, Fe deposits, geol., 73-2469; *Taurus Mts.*, tectonic mélange, 73-930; *Vilayet Giresun*, *Piraziz*, poly-metallic ore deposit, min., 73-259
- Turkmenia v. *USSR*
- Turquoise, synthetic, 73-2640; visible & near-IR spectra, 73-1066
- Turquoise-chalcosiderite series, rashleighite part of, 73-2934
- Tuscany v. *Italy*
- Tuva, *Russian SFSR v. USSR*
- Tux, *Tyrol v. Austria*
- Tvedalen, *Larvik v. Norway*
- Tweed, *N.S.W. v. Australia*
- Tweed, *Ontario v. Canada*
- Twinning, classification, twinning joints, 73-213; estimation of twinning parameters, 73-1156; hexagonal & tetragonal symmetry in twinned crystals, 73-214; penetration, in class 43m crystals, 73-1279
- Týn, *Bohemia v. Czechoslovakia*
- Tyrol v. *Austria*
- Ua Pu, *Marquesas Is. v. Pacific Ocean*
- Uchi Lake, *Ontario v. Canada*
- UGANDA, Pleistocene stratigraphy, 73-959; structure & correlation in Precambrian systems, 73-931; south-east, age of Precambrian granitic rocks, 73-12, carbonatite-derived sediments, 73-984; *Bukusu*, feldspathic vent agglomerates, 73-960; *Kilembe orebody*, correlation & stratigraphic position of host rocks, 73-1422; *Lake Maheda*, northupite in sediment, 73-2925; *Mbara area*, geomorphology, 73-1957; *Nyamutito mine*, wolfram mineralization, structural control, 73-1421
- Uinta basin, *Utah v. USA*
- Ukrainian SSR v. *USSR*
- Ulexite, visible & near-IR spectra, 73-1066
- Ulkan pluton, *Russian SFSR v. USSR*
- Ullmannite, *Bushveld complex*, possible occurrence, 73-756; *Ontario*, anal., 73-3554
- Ultrabasic inclusions, geochem., petrogenesis, 73-1671
- Ultrabasic rocks, classification of spinels, 73-1898; *Ural Mts.*, distribution, origin, related ore deposits, 73-271
- Ultramafic complexes, serpentinised, structure, 73-2034; *Switzerland*, min., petrog., 73-2124
- Ultramafic minerals, *Hawaii*, nature of source material, 73-487
- Ultramafic nodules, melting experiments, 73-2572; *Antarctica*, in basalt, Sr isotope ratios, 73-516; *New Zealand*, petrofabric studies, 73-2035
- Ultramafic rocks, alpine-type, quantitative classification, 73-2954; as hosts for magmatic ore deposits, 73-246; induced electrical polarization in, 73-1380; K-rich, origin, 73-1578; of gabbroid associations, classification, 73-3029; *India*, emplacement of chromite bearing, 73-935; *India*, petrog., modal anal., 73-1040, petrol., geochem., 73-1991, olivines from, 73-3978, south, review, 73-835; *Norway*, petrol., 73-1967; *S. Australia*, geol. of intrusion, 73-3043; *Ukrainian shield*, new type of assoc., 73-3027; *USA*, alpine-type, Sr isotopes in, 73-2686; *Venezuela*, chem. modal anal., 73-2012; *W. Australia*, Archaean, petrol., 73-1993, primary min. & textures, 73-904, skeletal crystal forms in, 73-841

- Um Bogma, Sinai v. Egypt*
Um Gerifat v. Egypt
Umiat, Alaska v. USA
Umra, Rajasthan v. India
 Unakite, polishing, 73-33
Uncia v. Bolivia
Union Bay, Alaska v. USA
United Arab Republic v. Egypt
 UNITED KINGDOM, barium mins., mining, 73-2516; celestine deposits, occurrence production & other source of Sr, 73-3626; sand & gravel production, 73-3626
 UNION OF SOVIET SOCIALIST REPUBLICS, boron mins., distribution, 73-303; Precambrian anorthosites, types and distribution, 73-1056; subsurface chem. erosion, 73-2704; far east, structure & distribution of Sn & W mineralization, 73-1377; *Caspian depression*, anal. of natural gases from depth, 73-1734; *central Asia*, pollucite-bearing pegmatite, 73-2539; *Chakal Range, Ustarasay*, jositite A, 73-774; *Chasov Yar*, min. of fireclay, 73-2327; *Kent massif*, riebeckite from pegmatites, 73-1820; *Kuraminskiy Mts.*, sulphate minerals, 73-1088; *Kyzyl Kum & Zirabulak Mts.*, granites & clays, Nb, Ta content, 73-1665; *Mariupol' Fe deposit*, distribution of Mg & Fe between co-existing olivine & pyroxene in eulysite, 73-2798; *Russian platform*, anatexite & metasomatite in Precambrian, 73-3178, gadinolite in granite of basement, 73-2815, "middle limestone" carbonate marker bed, lithology, 73-3118, east, minor elem., distrib. in Lower Carboniferous, 73-1689; *Sea of Okhotsk*, distribution of metals in sediment core, 73-2713; south, northeastern strike of tectonic lineaments on epi-Hercynian platform, 73-2975; *Tazheran*, first Russian find of magnesium kirschsteinite, data, 73-2800; *Turanian platform*, Precambrian basement rocks, 73-3179
 —, ARMENIAN SSR, Cu-Mo deposits, geochem. of Pt group elems., 73-3783; *Azatek*, semseyite-fülopptite series, 73-775; *Jafan*, first occurrence of lazareviciite in USSR, 73-1892
 —, AZERBAIDZHAN, He content of hydrocarbon gases, 73-2735; *Martuna*, gonardite, crystal structure, 73-1314
 —, GEORGIAN SSR, *Chiatara*, baryte in Mn deposit, 73-2518
 —, KAZAKHSTAN, role of ground-water in genesis of hydrothermal deposits, 73-2725; *Alasu*, Zn-bearing jacobinite, 73-2881; *Dzhez-Kazgan*, geochem. of Re in oxide zones of sulphide deposits, 73-1630; *North Kounrad*, new Bi-sulphides of Ag, Cu, Pb, 73-1945; *Severo-Ural'sk*, bauxite development, 73-1481; *Turgay Trough*, magnetite hornfels, 73-269
 —, KIRGHIZIAN SSR, *Khaidarkan*, galchhaite, new min. from As-Sb-Hg deposits, 73-1936; *Tien Shan*, trap assoc., 73-3030
 —, RUSSIAN SFSR, formation of granitoid complexes, K/Ar ages, 73-1123; *Aldan Shield*, two stages of metamorphism in faults, 73-1124, volcano-plutonic ring complexes, geol., 73-3086; *Altai Mts.*, metamorphism & thermodynamic conditions, 73-3181, prehnite-feldspar metasomatite in skarn, 73-3150; *Baikal*, sunglite from peridotite residuum, 73-2844; *Barguzin Bay*, ilmenitemagnetite sand, 73-1428; *Burpala*, first find of brewsterite, 73-2873, RE Sr oxy-apatite, 73-2930; *Batumi*, residuum & hydrothermal deposits, 73-2329; *Belozerkka*, carbonatization of magnetite in ferruginous quartzite, 73-3120; *Caucasus*, eclogite, min., 73-3183, heat flow in drill hole, 73-1426, *Urup*, form of Au in pyrite deposit, 73-737; *Chadobets uplift*, rare metal carbonatite, 73-833; *Cisbaikalia*, *Synnyr massif*, apatite min., 73-793; *Ciscaucasia*, structure of Cretaceous complex & pre-Cretaceous substrata, 73-2973; *Enisei*, Ni-Cu deposits, zoning, 73-268, *Gorev*, gudmundite, 73-766; *Gornyy Altai*, age of Hg mineralization, 73-266; *Gulya intrusion*, banding in carbonatite, 73-2972; *Gutar-Biryusa*, magnesian skarn at contact between muscovite, pegmatite & marble, 73-3149; *Kamchatka*, basic & ultrabasic plutons, structural facies zones, 73-2018, Quaternary acid volcanism, 73-2047; *Kamchatka & Kuril Is.*, formation of Hg, Sb, As sulphides from hot spring, 73-1717; *Karelia*, metamorphism of clastic quartz, 73-2862, Precambrian pyrite ores, primary textural indications, 73-1374; *Ladoga*, first find of ferruginous quartzite in Precambrian, 73-2973; *Kavalerovo district*, Cr-rich spinel in sulphide-cassiterite deposits, 73-2879; *Khibiny*, secondary alteration of inclusions in nepheline, 73-724; *Khovuakinsk*, Ag-rich pentlandite, 73-758; *Kola Peninsula*, course of crystallization & secondary mins. in alkali granite, 73-886; *Koryak Mts.*, subalkalic basalts, 73-889; *Kurile Is.*, neogene volcanic sedimentary formations, 73-3122, palagonite-chlorophaeite mins., chem. anal., 73-1836, Quaternary basaltoids, chem. of gases in, 73-2736, secondary S-bearing quartzite, facies types, 73-1381; *Kurile-Kamchatka volcanic province*, chem. of Quaternary basalts, 73-2678; *Kursk*, hydrothermal metamorphism, Au content in lower Proterozoic strata, 73-270; *Kuznetskiy Alatau*, gabbro-diorite-dolerite assoc. of Pezas horst, 73-3028; *Lovozero Tundra*, new mineral, ilmaioikite, 73-807, raite, zorite, new mins., 73-4081; *Minusinsk*, sulphides in ultramafic inclusions from diatremes, 73-2664; *Morkoka R.*, silicified kimberlite pipe, 73-3148; *Noril'sk*, natural Pt, Pd, Sn, Pb, solid solutions, 73-1944, new min. shadlunite in Cu deposit, 73-4082; *Okhota pluton*, spessartine eclogite, eulysite, min., 73-3182; *Okhotsk-Chukotka volcanic belt*, mercury zones, 73-1375, types of Au-Ag deposit, 73-1376; *Rudnyy Altai*, mawsonite, data, 73-2904, pyritic ore deposit, vertical zoning & age, 73-264, *Zarechenskoye*, age relations of dykes & baryte-sulphide ore, 73-1429; *Sadon*, Pb-Zn vein mineralization in different rocks, 73-2500; *Sakhalin*, altered eclogite chem. anal., 73-1038, first find of pseudobrookite, 73-744; *Saratov*, cinnabar in placers, 73-2473; *Sayan*, Cu mineralization, 73-2474; *Sayan-Baikol region*, Sr distributions in gabbroids, 73-2682; *Sea of Japan coast*, metamorphic rocks, new data, 73-3184; *Siberia*, austinite in Co-Ni-arsenide deposit, 73-1929, C isotopes in natural gas, 73-2737, faulting in fold belt around Siberian platform, 73-2971, late Pleistocene glaciations, ¹⁴C ages, 73-1126, new paragenetic type of Ta-, Cs-bearing pegmatite, 73-3025, *Maymecha R.*, meymechite dykes with vitreous margins, 73-3023, meymechite tuffs, new data, 73-3024; *Siberian platform*, kimberlite, radioactivity, 73-2689, redistribution of silica in carbonate rocks, 73-3117; *Sokhondo*, Bi sulphotellurides, EM anal., X-ray, reflectivity, VHN data, 73-1890; *Talnakh*, Ag-rich pentlandite, 73-758; *Tataria*, biotite in crystalline basement, 73-689; *Taygonos Peninsula*, petrol. of metamorphic complex, 73-3180; *Taymyr*, trilinearity & ordering of K-feldspar in Precambrian granites, 73-1838; *Timan region*, origin of Viséan bauxite, 73-2717; *Timan-Kola region*, Devonian dolerites, geol., age, 73-887; *Transbaikal*, Au-Mo belt, boundaries, 73-267, Au in pyrite, finely divided, use in assaying, 73-1430, Te-bearing canfieldite, 73-1942, *Darasun ore field*, rickardite, weissite, 73-1894, semseyite-fülopptite series, 73-775, *Klichka ore field*, distribution patterns of deposits, 73-1427; *Transcaucasia*, date of Neogene & Quaternary effusives, 73-3286; *Tuva*, Mesozoic mineralization, 73-2476, zirconophyllite, Zr analogue of astrophyllite, 73-2951; *Ulkun pluton*, rare alkalis & trilinearity in K-Na feldspar, 73-1839; *Ural Mts.*, classification of volcanic activity, 73-3026, Cu deposits related to gabbro-diorite intrusions, 73-1425, *Urals*, microcline phenocrysts in granitoids, 73-1400; omphacite from glaucophane schist, amphibolite & eclogite, 73-2830, pyrite deposit, 73-2497, sulphate mineralization in pyrite deposits, 73-265, ultrabasic rocks & metallogeny, 73-271, wavellite, data, 73-1922; *Yakutia*, association of tetradymite, jositite A and jositite B, 73-773, chrome-rich garnets in kimberlites, parageneses, 73-3983, min. transformation in basic garnet schist, 73-2106 olivine-garnet-chrome diopside inclusions in diamond, 73-3068, *Gal-Khaya*, aktashite, new data, 73-2938, galchhaite, new min. from As-Sb-Hg deposits, 73-1936, *Mir*, diamond-bearing eclogite in kimberlite, 73-3067, distribution of spinel-type diamond twins, 73-735, syngenetic ozocerite & maltha kimberlite, 73-520; *Zhuravka*, geothermal anomaly, 73-1626
 —, TADZHIK SSR, *Kara-Kamar*, semseyite-fülopptite series, 73-775; *Pamir Mts.*, zoning of metamorphic rocks, 73-2140
 —, TURKMENIA, *Cheleken*, migration of Pb & Zn in brines, 73-1720, 1721
 —, UKRAINIAN SSR, new type of ultramafic assoc., 73-3027; *Azovregion*, holmquistite-asbestos, data, 73-682; *Crimea*, *Karadag*, hyaloclastite, 73-2052; *Crimean Mts.*, epigenetic recrystallization of limestone, 73-3121, Late Triassic volcanism, 73-888; *Dnieper* Cu & Mn mineralization, 73-2498; *Donbas*, age of hydrothermal mineralization, 73-2475, clay mins. of Poltava series, 73-2342, mafic extrusives & pyroxenite, comagmatic?, 73-3066, microtextures of pyrite from coal seams, 73-1873; *Rozdolsk*, copiapaites of oxidation zones of S deposits, 73-782; *Ukrainian Shield*, abyssal mafic rocks, chem. composition, 73-2687, geochronological subdivision of granites, 73-3287; *Vyskova*, Fe-rich saponite in diorite-porphyre, 73-1833
 —, UZBEK SSR, west, finely dispersed Au in pyrite & arsenopyrite, 73-2477; *Fergana*, moissanite from sedimentary deposits, phys. X-ray data, 73-1865
 UNITED STATES OF AMERICA, boron mins., distribution, mining, 73-303; characteristics of estuarine sediments, 73-3133;

UNITED STATES OF AMERICA, (contd.)

Cu mining history, 73-2458; determination of Hg in some coals, 73-546; jasperoid, characteristics, origin, economic significance, 73-4274; localities for fluorite specimens, 73-3238; *Appalachians*, metamorphic maps, 73-1034; min. deposits in Precambrian to Middle Ordovician rocks, 73-1394; *Appalachian Valley*, min. deposits, fluid inclusion studies, 73-1397; *Atlantic coast*, beach & dune sediments, 73-3144; *Atlantic coastal plain*, Cretaceous sediments, petrol., origin, 73-3137; *Basin & Range* plutons, Cl in biotite, 73-3761; *Columbia R.*, clay mins., 73-3429; *east* Cambrian, Ordovician carbonate rocks, dolomitization model, 73-2093; Taconic slate belt, strain values, 73-4092; early Miocene tuffs & lavas, Sr isotopes in, 73-2683; *east*, Upper Precambrian strata as host rocks for mineralization, 73-3575; *Green River formation*, ankerite, 73-2919; *Gulf Coast*, burial diagenesis in pelitic sediments, 73-199; *High Plains*, genesis of sepiolite and palygorskite, 73-180; *Lake Chatuge*, alpine-type ultramafic rocks, Sr isotopes in, 73-2686; *Lake Michigan*, As in ferromanganese nodules, 73-1696; depositional patterns, facies & tr. elems. in Late Pleistocene sediments, 73-4278; velocity of sound in sediments, 73-4349; *New England*, effect of atmospheric S on chem. weathering, 73-558; *north-west*, ground-water in basalt, 73-2724; *south*, Buckner formation, petrol., 73-4286; *south-east*, clay mins., transport & deposition, 73-3425; Lower Palaeozoic palaeoaquifer, 73-1393; *38th parallel lineament*, relation to ore deposits, 73-3573; *Upper Mississippi valley*, guide to base-metal district, 73-3581, Pb isotopes reassessed, 73-3580, Pb-Zn district S isotope fractionation during ore deposition, 73-3774; *west*, acid volcanic rocks, chem. "fingerprinting", 73-3857, phosphate field, geochem., 73-2699

—, ALABAMA, gibbsite in weathered granitic rocks, 73-3413; Hg in river sediments, 73-2696; opal, zeolites & clays in neritic bar sand, 73-2866; *Wetumpka*, black jasper "basanite", 73-3250

—, ALASKA, geochem. prospecting, 73-2743 to 2748; *south*, geochem., & distribution of Pt-group metals in mafic & ultramafic rocks, 73-506; *south*, geol., 73-2996; *Amchitka I.*, aeromagnetic survey interpretation, 73-1961; *Annette I.*, geology, 73-843; *Bornite*, *Ruby Creek*, Cu deposit, min., S isotopes, 73-1452; *Brooks Range*, geochem. exploration, Au, Ag, Pb, As anomalies, 73-285; *Coast range complex*, Tertiary lamprophyre dyke province, 73-3050; *Goodnews Bay*, Cr-Al magnetite, Rh alloys, in Pt nugget, 73-4040, mertieite, new Pd mineral, 73-2946; *Shellabarger Pass*, massive sulphide deposits, 73-1382; *Taku Inlet*, water & sediment in glacier outwash area, 73-4267; *Umiat*, bentonites, cristobalite & clinoptilolite, in, 73-4029; *Union Bay*, volume increase related to serpentinization, 73-1024; *Valley of Ten Thousand Smokes*, quartz crystallization in volcanic ash, 73-721

—, ARIZONA, obsidian, faceted 16-carat, inclusions, in 73-4168; obsidian localities, 73-2006; placer Au deposits, 73-2488; regional fracturing in laramide stocks, & porphyry Cu mineralization, 73-2487; xenoliths in kimberlite-bearing breccia pipes, 73-2045; *Bisbee*, tilasite, crystal

structure, 73-2438; *Bradshaw Mts.*, Precambrian geol., 73-3200; *Buell Park*, tremolite with high richterite-molecule content, 73-2833; *Cordes area*, Precambrian rocks, 73-2152; *Frisco Mts.*, brochantite, DTA curves, 73-1931; *Gila County*, 79 mine, mineralogy, paragenesis of Cu-Pb-Zn deposit, 73-3247, 3248; *Inspiration mine*, nature & origin of black chrysocolla, 73-2513; *Jerome*, sulphide deposits, geol., 73-3621; *Phoenix*, salt body, geol., 73-1702; *Ray*, chronology of intrusion & ore deposition, 73-3297; Holocene Cu orebody, 73-1465; *San Pedro Valley*, non-marine sediments, petrog., 73-4291; *Santa Rita Mts.*, Cainozoic geol., 73-4126

—, ARKANSAS, clastic dyke, 73-1001; *north*, Ordovician petrol., 73-2096; *Magnet Cove*, carbonatite, O & C isotopes in coexisting mins., 73-1676; *North Little Rock*, quartz, rectorite, cookeite in veins in sandstone, 73-1835; *Wilson Mineral Springs*, miserite aggregates, 73-1099

—, CALIFORNIA, crystal spreading, hot brine potential, 73-1404; fluorite deposits, 73-3657; granitic & gneissic rocks near *San Andreas* fault, petrog., chem., 73-3054; guide to Au districts, 73-3585; meteorites of, 73-3955; min. resources, 73-3583; obsidian localities, 73-2006; supplement to min. occurrences bulletin, 73-4371; *continental slope*, dolomite boulder, 73-4288; *Ben Lomond Mt.*, plutonic & metamorphic rocks, 73-4127; *Blanco Mt. quadrangle*, plagioclase & other min. equilibria in contact metamorphic aureole, 73-1846; *Bodie*, age of volcanic rocks & Au veins, 73-3298; *Calico district*, Ag mining history & geol., 73-3584; *Channel Is.*, caliche, 73-3656; *Coalinga*, artinite, heat capacity at low T & entropies, 73-3667; *Colorado R. delta*, composition & mean age of detritus, 73-4289; *Crestmore*, scawtite, crystal structure, 73-2365; *Darwin mine*, galena & sphalerite, minor elem. fractionation, 73-1638, minor elem. content of sulphides, 73-1632; *Death Valley*, hydroboracite specimens, 73-3251; *Death Valley-Kingston Range*, talc deposits, petrog., 73-3658; *Dunsmuir*, baryte deposit & prospecting, 73-3654; *Flagstaff Hill*, chlorite series investigation, 73-4018; *Gold Hill*, osarsite, new Os-Ru sulpharsenide, 73-809; *High Sierra Primitive Area*, min. resources, 73-286; *Huntingdon Lake*, granitic rocks, analytical data, 73-3053; *Inyo County*, S crystals, 73-1100, *Coso Hot Spring*, ferrian copiapite, crystal structure, 73-3495; *Klamath Mts.*, blueschist metamorphism, 73-2153, quartz diorite, geochem., petrogenesis, 73-1670; *Kramer borate district*, mineral guide, 73-4376; *Lake County*, low-T crystallization in natural alkaline spring, 73-751; *Lakeview Mts.*, geochem. field sampling methods, 73-3864; *Laytonville*, deerite, howieite, zussmanite in glaucophane schist, 73-4373; *Mariposa County*, nephrite jade, 73-4374; *Mojave Desert*, playa crusts, min., phys. properties, 73-2333; *Mono L.*, *Paoha I.*, newberyite, monetite in diatomite beds, 73-4068, struvite, 73-4069; *Mount Hamilton*, melanophlogite in serpentine fractures, 73-1855; *Mountain Pass*, bastnäsite, ²⁴⁴Pu content, 73-488, europium oxide in carbonate-baryte orebody, 73-3655; *Panoche Pass*, amphibolite, paragenetic relationships, 73-3199; *Potrero Hills & Rio Vista*,

Domengine formation, petrol., 73-4290; *Romona*, geol., 73-4128; *Riverside County*, Cu in rock tubes, 73-4036; *Rocky Hill & Lights Creek* stocks, base metal distribution in, 73-3773; *Salmon-Trinity Alps*, min. resources, 73-2490; *San Andreas fault area*, coexisting hornblendes & biotites from granulitoids, 73-2836; *San Benito County*, benitoite, neptunite, joaquinite, chem. composition, phys., opt., structural properties, 73-659; *San Gabriel*, structure of petrol. of anorthosite-syenite body, 73-920; *Santa Cruz, Kalkar quarry*, mineralogy, 73-4372; *Searles Lake*, hanksite, crystal structure, 73-2419; *Sierra National Forest*, min. resources, 73-1466; *Sierra Nevada batholith*, chlorites from granitic rocks, 73-2842, RE elems. in accessory min., 73-2669, metamorphism of calcareous rocks in roof pendants, 73-4304, tr. elem. content of some plutonics, 73-1668; *Sonoma County*, leteovite on massive mascagnite, 73-4375; *Southern California batholith*, Bi geochem., 73-3791; *Trinity County*, silhydryte, new mineral, 73-810; *Tulare County*, granitic rock & ore distrib., 73-3623; *Yosemite Valley*, granitic intrusions, petrog., 73-4169

—, COLORADO Au content of natural waters, 73-552; Green R. formation, tuff beds correlated by biotites, 73-2005; *Boulder County*, *Copper King mine*, violarite occurrence, 73-2182; *Clear Creek County*, distribution & abundance of Au, 73-564; *Colorado Plateau*, crustal-upper mantle model, 73-3080; *Creede*, flow rate of ore-forming solutions in OH vein, 73-1633, relation of mineralization to thermal springs, 73-1658; *Front Range*, thermal metamorphism of cordierite-garnet-biotite greiss, 73-2104; *Dotsero*, cristobalite known as Dotsero diamond, 73-1097; *Gunnison County*, *Brown Derby No. 1*, pegmatite, paragenesis of topaz-bearing portion, 73-919; *Geneva District*, *Treasury mine*, schirmerite, new data, 73-2893; *Hahns Peak*, source of placer Au, 73-3620; *Iron Hill*, apatite equilibrium with calcite in carbonate, 73-2928; *Long Peak*, granite pluton, crustal structure-heat flow model, 73-4353; *Piceance Creek*, clay min., 73-2341; *Pitkin County*, *Aspen quadrangle*, Ag, Pb, Zn mining map, 73-1403; *Purgatoire River Valley*, coal dykes intruding lamprophyre sills, 73-1012; *Red Mts.*, As as indicator for mineralized volcanic pipes, 73-3858; *San Juan Mts.*, geol. & ore deposits, 73-2489, replacement orebodies & assoc. veins, 73-2512; *Skull Creek*, geochem. anomalies & alteration in Moenkopi formation, 73-3824; *South Plate* study of U in river water, 73-1712, thalenite & allanite derived from yttrio-fluorite, 73-662

—, CONNECTICUT, *Portland*, pollucite mines, 73-2181

—, FLORIDA, selective dolomitization of recent sedimentary structures, 73-4295; *Choctawhatchee Bay*, elemental S in recent sediments, 73-2693; *Sugarloaf Key*, dolomite distribution in tidal flat, 73-2099

—, GEORGIA, *Cartersville*, baryte fluid inclusion geothermometry, 73-2520; *Holly Springs*, hydroxyapatite chloride ions in apatite lattice, 73-794; *Rabun & Habersham Counties*, geol., 73-3201

—, HAWAII, orientation and growth of volcanic rifts, 73-961; *Hualalai*, pillow

- UNITED STATES OF AMERICA, HAWAII, (contd.)
 lava in historic flow, 73-2066; *Kilauea*, volcanic flames, 73-4215; *Maui*, feldspars & interstitial material in volcanic rocks, 73-2065; imogolite & allophane formed in saprolite of basalt, 73-3412; *Mauna Kea*, Holocene eruptions, 73-964; *Mauna Ulu*, lava tube formation, 73-962; *Oahu*, rhyodacite, composition, min., 73-4171; *Salt Lake Crater*, eclogite inclusions, geochem., petrogenesis, 73-1671, geol., 73-2064; source material for ultramafic mins., 73-487
- , IDAHO, intersection of Hope fault & Purcell trench, tectonic events, 73-1964; north, Pb isotopes & mineralization ages, 73-1143; *Blaine County*, Pb-Ag deposits, min., trace elem. content, 73-3619; *Coeur d'Alene*, galena ore, heating experiment, 73-3692, zoning of major & minor metals, 73-2308; *Hall Mt.*, Th-rich veins, 73-2535; *Idaho batholith*, Bi geochem., 73-3791; *Mackinaw Creek*, opal & agate in silicified Sequoia tree, 73-458; *Salmon River Breaks Primitive Area*, geol., fluorspar deposit, 73-851; *Spencer*, opal mining, 73-455
- , ILLINOIS, clay mins., in coals, 73-3424; coal rank pattern, 73-2094; lateral gradation of Salem & St. Louis limestones, 73-4282; min. production in 1970, 73-3570, 3571; sideritic concretions in shale, gravel & till, 73-4283; south-east, late Pleistocene lacustrine deposits, geol., palaeontol., 73-3434; *Cave-in-Rock*, O & C isotopes, texture & min. in altered limestone, 73-2670; *Lake Saline*, chem. of sediments in late Pleistocene, 73-3820; *Peoria & Tazewell Counties*, clay & shale resources, 73-3439; *Scott County*, limestone resources, 73-3650; *Upper Peoria Lake*, tr. elems. in bottom sediments, 73-4281
- , INDIANA, K-bentonite, Middle Devonian marker bed, min., 73-3416; *Bedford*, endellite, globular clusters, 73-178
- , IOWA, Ordovician K-bentonites, 73-2332; source of giant drift boulders, 73-2001; weathering of dolomitic limestone, phys., chem., 73-1693; *Dolliver State Park*, sulphate efflorescences, min. composition, 73-2913
- , KANSAS, C isotopes in shales, 73-542; hexahydrate ubiquity, 73-1096; *El Dorado*, petrol. of Viola formation, 73-2095; *Phillips & Wallace Counties*, montmorillonitic clays, DTA studies, 73-1218; *Riley County*, kimberlites, petrol., 73-850, xenoliths in kimberlite, 73-2043
- , KENTUCKY, anals. of clays & shales, 1960-1970, 73-1265; baryte deposition, 73-294; *Frankfort*, Lexington limestone, relation of min. & texture, 73-4285; *Ison Creek*, magnesian ilmenite from kimberlite, 73-1909; *Porters Creek Clay*, volcanic origin of parts, 73-1000
- , LOUISIANA, diagenetic alteration of clay mins. in Tertiary shales, 73-200; west, Catahoula formation, petrol., 73-4294; *Lakes Pontchartrain and Maurepas*, selective adsorption of Na by clay minerals, 73-118
- , MAINE, sulphide-silicate reactions in metasediments, 73-1020; north, prehnite-pumpellyite facies metamorphism, 73-2148; *Deboullie* stock, experimental studies, 73-3684; *Plumbago Mt.*, rose quartz & other mins., 73-4367; *Penobscot Bay*, age of granites, 73-1140; *Piscataquis County*, Moxie pluton, geol., 73-3010; *Tunk Lake*, zircon variation in granite, 73-2039
- , MARYLAND, *Harford County*, Coastal Plain rocks, geol., 73-4284, crystalline rocks, petrog., chem. & modal anals., 73-4344, min. resources, 73-3572, talc, crystal structure, 73-3467
- , MASSACHUSETTS, east, significance of riebeckite & ferrohastingsite, in microperthite granites, 73-1821; *Boston*, organic compounds in river water, 73-1713; *Boston harbour*, surficial sediments, 73-4275
- , MICHIGAN, meteorites, description, 73-3956; native Cu district, mining extensions geol., 73-3618; rocks & mins., 73-4124; *Ironwood*, palaeomagnetism of Keweenaw rocks, 73-2166; *Keeweenaw*, degradation & metamorphic differentiation of lavas, 73-1007; *Marquette County*, geol. of southern complex, 73-4125, *Ishpeming*, mineral occurrences, 73-1102; *White Pine*, age of Keweenaw rocks, 73-1141, of quartzporphyry, 73-1142, mineralization in Cu deposit, 73-1455 to 1459, rocks above & below Cu ore zone, petrochem., 73-1648, S isotope study, 73-3769
- , MINNESOTA, south-east, clay min. of Glenwood formation, 73-3422; *Duluth*, basalt hornfels compared with lunar rock, 73-602; *Mesabi Range*, manganaxinite, 73-667; *Morton gneiss*, geochem., petrogenesis, 73-1670
- , MISSISSIPPI, opal, zeolite & clays in Meridian sand, 73-2866; *Little Tallahatchie R. watershed*, Th, U & K in sedimentary rocks, 73-3825; *Yazoo County* mineral specimens, 73-1098
- , MISSOURI, south-east, lead ore genesis & distribution, 73-3579, source of Pb in galena ores, 73-3775; *Bates County*, allophane & Na-rich alunite from kaolinite nodules in shale, 73-3409; *Decaturville*, Cambrian mud volcano, intergrowth & crystallization features, 73-2299; *Sre. Genevieve County*, Upper Cambrian K-bentonite, min., 73-3426
- , MONTANA, northwest, Pb isotopes & mineralization ages, 73-1143; *Butte area*, min. of pegmatites, 73-1101; *Dillon*, locality for mordenite, etc., 73-1103; *Elkhorn Mts.*, volcanic field, magnetizations, 73-3230; *Flint Creek Range*, mines & min. deposits, 73-1401; *Great Falls-Mission Range*, geol., geophys. studies, 73-1963; *Phillipsburg batholith*, Mn content & distribution, 73-1667; *Shonkin Sag*, apatite chem. & P fugacity, 73-792; *Silver Bow mine*, pearcite, data, 73-772; *Square Butte*, alkali-gabbro laccolith, pseudo-rhythmic layering, 73-2041; *Stillwater complex*, bronzite, combined EM & anal., 73-3999, formation of immiscible sulphide liquids in H chromitite zone, 73-1652, genesis of mesozonal granitic rocks below base of complex, 73-3052, grain-size variations within olivine cumulate, 73-918, pentlandite, pyrrhotite, Fe:(Fe + Ni) ratios, 73-4049, variation of Pt, Pd & Rh, 73-3784; *Tobacco Root Mts.*, trends in sandstone lithology, 73-3134
- , NEVADA, fluid-inclusion studies of some Au deposits, 73-482; south, Fe-Ti oxide phenocrysts in zoned ash-flows, 73-2883; *Amargosa Desert*, sepiolite-rich playa deposit, 73-705; *Carlin*, Au concentration, c.e.c. by phyllosilicates, 73-1646, 1647, Au deposit, major & minor elems., 73-3782, Sb-bearing orpiment in Au deposit, 73-1884; *Copper Canyon*, porphyry Cu deposit, ore fluids in, 73-1464; *Goldfield*, primary & secondary sulphates, 73-1643; *Nye County*, *Slate Creek*, gold deposits, 73-1463; *Quinn Canyon Range*, fluorite deposits, 73-2523; *Silver Peak Range*, zeolitic diagenesis, 73-3142; *Snake Range*, apatite from granitoid rocks, 73-1923; *Terraced Hills*, halloysite deposits, 73-181; *White Pine County*, heytite, new mineral, 73-2943
- , NEW HAMPSHIRE, *Red Hill*, igneous complex, feldspathoid rocks, 73-4199; *White Mountain*, modal variation in granites of plutonic-volcanic series, 73-916
- , NEW JERSEY, Mn & Zn in amphibolites near mines, 73-1706; *Berkshire Valley*, quartz syenite intrusion, petrol., 73-2042; *Brookville*, nepheline in syenite confirmed, 73-917; *Cliffwood*, rocks, mins. on beach, 73-3243; *Dover*, regional recrystallization magnetite concentrations, 73-1386; *Franklin*, calcite of pseudo-octahedral habit, 73-3243; *Franklin & Sterling Hill*, min., occurrences, descriptions, 73-4370, min. list 73-2306; *Lambertville diabase*, stable remanent magnetism, 73-1077
- , NEW MEXICO, age of basement rocks, 73-3299; min. & water resources, 73-3587; central, clay mins., chem., phys. data, 73-3440; east, caliche deposits, clay mineralogy, 73-1260; north, phlogopite development in low Mg rocks, 73-4007; *Carlsbad Caverns*, carbonate deposition, 73-4292, dolomite deposits, 73-4293; *Grants region*, U deposits, 73-2491; *High Plains*, caliche, origin geol., chem. anals., 73-1486, 1487; *Hogback No 4 mine*, smoky quartz assoc. with U mineralization, 73-1850; *Kelly mine*, smithsonite, 73-3253; *La Bajada*, U-organic matter association, 73-2666; *Las Cruces*, basalt cones & flows, 73-4218; *Rio Arriba County*, Fe-bearing rocks, geochem. background values, 73-3776, genesis of banded Fe deposits, 73-1467, 1468, staurolite-quartzite bands in kyanite quartzite, 73-1028; *Sandia Mts.*, spessartite dykes, differentiation trends, 73-2007; *Socorro County*, *Apache Warm Springs*, geol., Be mineralization, 73-3586; *Stevenson Bennett mine*, mineralogy, 73-3252; *Walnut Wells quadrangle*, geol., 73-4129
- , NEW YORK, Onondaga limestone, colophane at base, 73-3136; west, cone-in-cone concretions, 73-4276, sedimentary pyrite, X-ray study, 73-4053; *Adirondack Mts.*, granulite facies, threefold division, 73-2149, origin of coronas in metagabbros, 73-3196, spinel inclusions in plagioclase of metagabbros, 73-1896; *Giant Mt.*, leuconorite inclusions in anorthosite, 73-849; *Green Lake*, diatoms in laminated sediments, 73-998; *Hudson R.*, concentration changes of Ca, Cu, Li, Mg, K, Na, Sr, 73-3846, Na uptake in sediments, 73-3809; *Rockaway Point*, heavy mins., deflation furrows, in beach salcrete, 73-3135
- , NORTH CAROLINA, mineral and gem occurrences, 73-457; west, gibbsite, 73-1256; *Deep River Basin*, histology, petrol. of Triassic vertebrate bone, 73-4380; *Footie mine*, brannockite, new Sn min. in pegmatite, 73-4078; *Jackson County*, dunites, petrofabric, 73-4201; *Kings Mountain*, new mineral tetrawickmanite, 73-2949, prehnite crystals, 73-707; *Macon County*, *Cowee Valley*, ruby, sapphire, rhodolite occurrences, 73-3249; *Mitchell*

UNITED STATES OF AMERICA, NORTH CAROLINA, (contd.)

- County, minerals in pegmatites, 73-3249; *Pamlico Sound*, Holocene sediments, organic & tr. elem. content, 73-543; *Sauertown Mt.*, itacolumite, flexible sandstone, 73-2097; *Wake County*, rubies, 73-2633; *West Farrington*, crystallization of pluton, 73-2044
- , NORTH DAKOTA, *Madora*, petrified peat, 73-999
- , OHIO, Kent kame moraine, heavy min. anal., 73-1002; *north*, gypsum crystal moulds in dolomite, 73-3140
- , OKLAHOMA, mineral resources & map, 73-1366, 1367; pedological study of Wellington formation, 73-1257; reserves of raw material for chem. industry, 73-1489; survey of carbonate mineral deposits, 73-296; *north-east*, bioherms of St. Joe limestone, petrog., 73-2098; *Arbuckle Mts.*, field trip stops, petrog., 73-1966, spherulites in phosphatic concretions, 73-2183; *Spiro Sand*, chlorite coatings on quartz grains & porosity, 73-4287
- , OREGON, obsidian localities, 73-2006; tr. elem. concentration in clays of volcanic ash soils, 73-176; *south-west*, Colebrook schist, relation to tectonic evolution, 73-1030; *Douglas County*, *Gold Ridge mine*, unusual gold occurrence, 73-1460; *Needle Point pluton*, phase relations in late-stage felsic sequence, 73-1526; *Newport*, U-series systematics in natural materials, 73-29; *Owyhee Dam*, cavanisite, pentagonite, new mins., 73-4079; *Wildcat Canyon*, recent sediments, heavy mins., 73-3138; *Willamette Valley*, zeolite deposits, geol., 73-1861
- , PENNSYLVANIA, clay mins. in soils, 73-207; shales, depth, porosity, clay min. orientation, 73-2331; *southwest*, underclay deposits, 73-3423; *west*, freshwater limestone, thickness, geochem. & palaeogeography, 73-4279, origin of underclays, 73-3421; *Lancaster Valley*, geochem. prospecting for Zn, Pb, Cu, Ag, 73-568
- , RHODE ISLAND, min. locality catalogue, 73-4367, 4368; *Narragansett Basin*, staurolite, kyanite & sillimanite, 73-3197; *Narragansett Bay*, biogeochem. of fatty acids in Recent sediments, 73-3836
- , SOUTH CAROLINA, ages in hydrothermally altered areas, 73-2237; fluvial monazite deposits, 73-2533; *Buffalo*, mafic igneous complex, petrol., 73-2003
- , SOUTH DAKOTA, griphite from pegmatites, new data, 73-801; *Black Hills*, utilization of mine dumps, 73-3649, Tin Mountain mine, spodumene crystals, etc., 73-2538 *Custer*, hureaulite, atomic arrangement, 73-3501; *Harney Peak*, W mineralization, 73-3569; *Trojan*, Au & Ag in mine tailings, 73-3617
- , TENNESSEE, cave descriptions, 73-1113; ore formation, palaeoaquifer symposium, 73-3576, 3577, 3578; saltpetre mining, 73-1113; Tertiary limestone aquifer system, 73-1389; *east*, age of mineralization in Lower Palaeozoic, 73-1399, fluorite inclusions studies in Zn deposits, 73-1388, ore controls, evolution of thought, 73-1391, origin of Lower Ordovician ore deposits, 73-1400; Zn district, age of collapse breccias, 73-1392; *north-west & east*, stream sediment geochem. studies, 73-563; *Bumpass Cove*, mining history, 73-1461; *Ducktown*, S isotopes in sulphide lenses, 73-3768; *Jefferson City mine*, bedded-ore structures, 73-1396; *Mascot-*

- Jefferson City area*, Zn-bearing structures, 73-1395; *Treadway*, ore controls & sedimentary features, 73-1390
- , TEXAS, natroalunite nodules, chem. anal., 73-4076; *south*, U deposits, geol., 73-2299; *west*, age of basement rocks, 73-3299; *Chinati Mts.*, min., deposits, 73-2514; *El Paso*, pegmatite, min., 73-2004; *Gonzales and Fayette Counties*, Eocene ash beds, petrog., 73-987; *High Plains*, pluvial lake sediments, clay min., 73-3430; *Kleberg Point lagoon*, stable C isotopes in blue-green algal mats, 73-1686; *Laguna*, *Paguete mine*, smoky quartz assoc. with U mineralization, 73-1850; Quaternary dolomite, occurrence, origin, 73-3143
- , UTAH, ages of various rocks, 73-2235; Fe deposits, 73-2486; Green R. formation, tuff beds correlated by biotites, 73-2005, leucosphenite in, 73-2814; index of mins., 73-3244; origin of pyrophyllite & rectorite in shales, 73-196, 2345; xenoliths in kimberlite-bearing breccia pipes, 73-2045; *Beaver County*, green grossular specimens, 73-3245, hydrothermal alteration, 73-2510; *Bingham*, age of porphyry-type mineralization, 73-287, igneous rocks & hydrothermal activity, 73-1462, zeolites, unusual, IR anal., 73-4035; *Cottonwood*, age of intrusive rocks, 73-2236; *Deep Creek Mts.*, geol., 73-3012; *Duchesne County*, eitelite, crystallography & structure, 73-3500; *Fairfield*, crandallite, thermal anal., 73-1928; *Garfield County*, U deposits, 73-2485; *Great Salt Lake*, clay min. at brine-sediment interface, 73-2347; *Needles Range*, Tertiary volcanics, 73-3096; *Ohio mining district*, cupro-bismutite, new data, 73-1887; *San Juan County*, petroleum, potash, ground water resources, 73-2527; *Sevier Lake*, subsurface brines & soluble salts of subsurface sediments, 73-2750; *Tooele County*, Pb, Cu, Ag, Au, As, W mineralization, 73-2511; *Uinta basin*, lacustrine & fluvial sandstone, petrog. distinction, 73-3141; *Utah County*, pyrophyllite-bearing clay in Clinton deposit, 73-2346; *Wah Wah Pass*, igneous complex, 73-3013; *Wah Wah range*, hydrothermal alteration & mineralization, 73-2509
- , VERMONT, *Ascutey Mt.*, silica diffusion around syenite, 73-4317; *Craftsbury*, "bullseye granite", origin of biotite orbicules in, 73-2040; *East Monkton*, kaolin, geol., origin, 73-1254; *Elizabeth mine*, geol., 73-1454; *Essex & Caledonia Counties*, geochem. prospecting for Cu, Pb, Zn, 73-1740
- , VIRGINIA, mines & minerals, 73-3246; *Berea*, U & Th content of quartz monzonite, 73-288; *Centreville*, *Fairfax Quarry*, minerals 73-1095; *Harrisonburg*, dolerite dyke, petrog., magnetic study, 73-2002; *James R. basin*, metamorphic zones determined by stream sediments, 73-1031; *Morgantown*, Pleistocene alluvium, clay min. & palynological relations, 73-1255; *Petersburg granite*, petrol., 73-2150, schistose xenoliths, petrol. & origins, 73-2151; *Shenandoah National Park*, greenstone, chem. alteration & spilitization, 73-4318
- , WASHINGTON, building stone, 73-3648; *north-east*, Pb-Zn deposits, geol., 73-3568; *north-west*, cherts & jaspers, petrol., 73-4270; *west*, limestone resources, chem., 73-3831; *Cascade Mts.*, Cainozoic volcanism, petrog., 73-4167, clay mineral

- formation in alpine environment, 73-206
- Kelso-Cathlamet area*, geol., min. resources, 73-3647; *Mount St. Helens*, pyroclastic layer T correlated with West Blacktail ash, 73-3095; *Stevens County*, bedded baryte deposits, 73-2519; *White Pass*, rocks & structure, 73-3011
- , WEST VIRGINIA, *Thorn Mountain Cave*, new calcite structure, 73-1915
- , WISCONSIN, Zn dispersion in Pb-Zn district, 73-492; *south*, silica sandstone, phys., chem. properties, reserves, 73-3653 *south-west*, geochem. prospecting in Zn area, 73-3860; *Black River Falls*, wavellite, geol. relations, X-ray crystallog., 73-798; *Marblehead*, electron optical observations on illite, 73-184
- , WYOMING, authigenesis of Wagon Bed formation, 73-4280; clay mins. of Green River formation, 73-1259; Green River formation tuffs, analcite & K-feldspar in, 73-2871, Green River shale, derivation of isoprenoid type acids, 73-3837; leucosphenite in Green River formation, 73-2814; montmorillonite, adsorption of n-alkanes, 73-1233; obsidian localities, 73-2006; reserves of zeolite-rich sedimentary rocks, 73-1488; *Atlantic City*, Precambrian Fe formation, geochem., origin, 73-3787; *Bighorn Mts.*, Precambrian gneiss, min., 73-3198, Precambrian rocks, chem. data, 73-4200, zircons in Precambrian gneiss, 73-1786; *Kane*, spherulitic limestone in Morrison formation, 73-3139; *Medicine Bow Mts.*, Precambrian geol., 73-1965; *Preacher Creek*, Precambrian ultra-mafic intrusion, origin, 73-2000; *Rock Springs*, origin of large kaolinite crystals in Almond formation, 73-3400; *Shirley Basin*, geol., U deposits, 73-1402, hollandite-coronadite in fossil bone, 73-1913, S isotopes in roll-type U deposit, 73-3778, U deposit, discrimination of biogenic & chem. pyrite, 73-1364; *Wind River*, greywackes, RE elements in, 73-3835; *Yellowstone National Park*, Absaroka volcanic supergroup, stratigraphy, 73-3097, geyser activity related to Earth tide, 73-969, hydrothermal springs, A & N contents, 73-3854, noble gases, 73-3855, obsidian hydration rinds, 73-4217, S isotope distribution in hot springs, 73-550, volcanic stratigraphy of rhyolite plateau, 73-968
- Untersee*, *Bodensee v. Germany*
Upper Peoria Lake, Illinois v. USA
Upper Volta v. Haute-Volta
Ural Mts., Russian SFSR v. USSR
Uraninite, Quebec, 73-1094; S. Dakota, & other mins. in mine, 73-2538; Zaire, ages, 73-2205
- Uranium, accumulation in pine & rhododendron, 73-1739; concentrations in marine sediments, 73-2711; determination in ion-exchange plants with X-ray absorption analyser, 73-3352; distribution in archaeological ceramics, dating, 73-573; evaluation of scintillometric geochemical & biogeochemical methods of prospecting, 73-1192, 1193; field determination by gamma-ray spectrometry, 73-1188; geochemical prospecting by radon, 73-1714; in carbonate sediments of hypersaline pool, 73-2714; migration in natural materials, 73-29; mobility in silicic volcanics, 73-1657; NAA determination in Apollo 11 fines, 73-3927; quantitative determination, 73-51; smoky quartz as indicator of mineralization,

Uranium, (contd.)

- 73-1850; *Colorado*, in river water, 73-1712; *India*, in limonite, 73-2504, prospecting, 73-1379; *Italy*, in Permian sandstones, 73-2299; *New Mexico*, resources, 73-3587; *Nova Scotia*, in stream sediments in Carboniferous rocks, 73-554; *Sweden*, geol. of strata, 73-2960; *Switzerland*, search for, 73-3531; *Virginia*, high in quartz monzonite, 73-288;
- compounds, α - UO_3 crystal structure, 73-2412; $\text{UO}_2(\text{OH})_2$ crystal structure, 73-2411
- deposits, comparison between East European & Canadian, 73-277; discrimination of biogenic & chem. pyrite in, 73-1364; roll-type, growth & maturity of ore-stage pyrite, 73-2460; *Gabon*, geol., 73-3602, isotopic anomalies, 73-3779, 3780, 3781; *New Mexico*, geol., 73-2491; *Saskatchewan*, paragenesis & isotopic composition of gangue mins., 73-2665, structural studies, 73-2507; *Texas*, geol., 73-2299; *Togo*, palaeoplacer, 73-262; *Utah*, geol., 73-2485, min., 73-2509; *Wyoming*, mining, 73-1402, S isotopes in, 73-3778
- isotopes, in Apollo 12 samples, 73-3919, 3920
- mineralization, *Australia*, age, 73-2210; *Austria*, 73-254; *Egypt*, 73-3598
- ores, leaching of sulphidic, 73-1349; *Witwatersrand*, determination of Mo in materials from processing, 73-1163
- Urano-organic matter, *New Mexico*, 73-2666
- Uranophane, *New Jersey*, 73-4370; *Quebec*, 73-1094
- β -Uranyl hydroxide, anisotropic thermal expansion, 73-3208
- Uri, *Sardinia v. Italy*
- Urup, *Caucasus, Russian SFSR v. USSR*
- Utah v. USA
- Uttar Pradesh v. India
- Uvarovite, v. garnet
- Uzbek SSR v. USSR
- Vadose cement, Ordovician, morphology, composition, 73-544
- Vaesite, *Poland*, in ores, 73-3535
- Vajreshwari, *Maharashtra v. India*
- Val Curnera v. Switzerland
- Val d'Ayas v. Italy
- Val d'Or, *Quebec v. Canada*
- Val D'Ossola v. Italy
- Val Masino v. Italy
- Val Mastallone v. Italy
- Val Malenco, *Sondrio v. Italy*
- Val Nalps v. Switzerland
- Valais v. Switzerland
- Valentinite, crystallization under hydrothermal conditions, 73-1545
- Valesia v. Italy
- Valle Bodengo, *Sondrio v. Italy*
- Valle Strona, *Novara, v. Italy*
- Valleriite, opt., chem. data, parageneses, 73-4059; *Bushveld complex*, 73-756; *Cyprus*, new data, 73-759
- Vallesvar v. Norway
- Valley of Ten Thousand Smokes, *Alaska v. USA*
- Valzerques, *Aveyron v. France*
- Vanadates, anal. of mean bond lengths, crystal structure of low TLi_3VO_4 , 73-3481
- Vanadinite, *Morocco*, in Sorbonne collection, 73-3266
- Vanadium, determination in silicate rocks by neutron activation analysis, 73-74; isotopes in lunar rocks & dust, 73-3924; rapid spectrophotometric determination in rocks, mins. & Ti ores, 73-1162; *India*, geochem., 73-479; *Iraq*, showing migration of oils, 73-1727; *New Mexico*, resources, 73-3587
- compounds, crystallography of $\text{V}_n\text{O}_{2n-1}$ ($3 \leq n \leq 8$)
- Vanalite, effect of hydrate-solvate layers & exchangeable cations on crystal lattice parameters, 73-755
- Vancouver I., *B.C. v. Canada*
- Van't Hoff, Jacobus Henricus, his life and work, 73-304
- Var v. France
- Várad, Banat v. Romania
- Variscite, *Sarawak*, in cave guano, 73-800
- Varulite-hagendorfite, *Rwanda*, 73-1925
- Västervik v. Sweden
- Vaterite, transformation related to formation of impurity centres, 73-389
- Vättern v. Sweden
- Velay, *Haute-Loire v. France*
- Velence Hills v. Hungary
- Vemparala, *Andhra Pradesh v. India*
- Vendée v. France
- VENEZUELA, *Coast Ranges*, tectonic evolution, 73-2008; *Paria Peninsula*, ultramafic rocks, chem., modal anal., 73-2012
- VENUS, past & present, 73-1105
- Verdite, *S. Africa*, origin of deposits, 73-3523
- Vermiculite, alkyl-ammonium complexes, IR study, 73-164; & mica, cation exchange selectivity, 73-2315; as model system in testing double layer theory, 73-110; Ca-Mg exchange, 73-119; clays, K fixation & c.e.c., 73-114; formation in alpine environment, 73-206; interaction of ammonia with, 73-1225; micaceous, cation & layer charge effects of blister-like osmotic swelling, 73-2316; Na-Li exchange equilibria, 73-121; Ni- & Mg-, exchangeable cation distribution, 73-3387; structural imperfections, 73-3452; surface charge characterization, 73-167; thin layers of H_2O in, 73-1226; *Czechoslovakia*, origin, chem. data, 73-693; *Kenya*, nature & $\text{Al}(\text{OH})_3$ complexes, 73-109; *Washington*, formation in alpine environment, 73-206
- Vermont v. USA
- Verneuil boules, of Ca_2SiO_4 , stabilization, 73-3676
- Vestfold v. Norway
- Vesturhorn v. Iceland
- Vesuvianite v. idocrase
- Yesuvius v. Italy
- Victoria v. Australia
- Victoria Land v. Antarctica
- Vilayet Giresun v. Turkey
- Villanova Monteleone, *Sardinia v. Italy*
- Violarite, stoichiometry, 73-4083; *Colorado*, 73-2182
- Virginia v. USA
- Viti Levu, *Fiji v. Pacific Ocean*
- Vivianite, Mössbauer spectra, 73-212; visible & near-IR spectra, 73-1066; *Carpathian Mts.*, in Tertiary sediments, 73-1700; *Japan*, in mudstone, chem. anal., 73-799; *Virginia*, 73-3246; *Yugoslavia*, specimens, 73-4362
- Vlasovite, *Russian SFSR*, 73-2930
- Vliermaal v. Belgium
- Volborthite, crystal structure, 73-1323
- Volcanic activity, energy of explosive eruptions, 73-953; observations by IR radiation meter, 73-963; *Antarctica*, 1970 eruption, geol., chem., petrol., 73-3101, 3102, 3103, *Deception I.*, 73-966; *Canary Is.*, *Teneguia*, 1971, 73-957; *Iceland*, present, 73-4205; *New Zealand*, 73-2060, 2061; *Réunion*, 1972 eruptions, 73-3090; *St. Vincent*, 1971-72, 73-4219, in late 1971, 73-2068, ejected plutonic blocks, min., 73-3098, petrol., 73-3099; *Ural Mts.*, classification, 73-3026
- ash, in cave flowstone & sediments, 73-3264; ratio to chert as orientation indicator in Archaean rocks, 73-2955; *Alaska*, quartz crystallization, 73-721; *Antarctica*, in ice cores, 73-3100, source, climatic influences, 73-3104; *Faeroe Is.*, *Scandinavia*, in peat bogs, age, 73-2193; *France*, recent, 73-3082; *Italy*, containing carbonized branch, age, 73-2200; *Kansas*, incipient expansion, 73-1074; *Mount Etna*, 1971 eruption, 73-3084; *Oregon*, tr. elem. concentration in clays from, 73-176; *Pacific Ocean*, in deep sea cores, 73-2988; *Scotland*, Tertiary, 73-3019; *Texas*, petrog., 73-987
- calderas, *Canary Is.*, collapse structures, 73-956
- complex, *Finland*, & associated manganese Fe ores, 73-856
- flames, *Hawaii*, 73-4215
- fluids, S isotope geochem., 73-1718
- gas, abnormal $^3\text{He}/^4\text{He}$ ratio, 73-1733; HF/SiF_4 ratios in, 73-2739; *Tr. Mtn.*, 1971 eruption, anal., 73-3084, 1972 eruption, 73-3085
- glass, *Pacific Ocean*, probable micro-lapilli in deep sea clays, 73-2986
- production rates, of oceanic ridges, islands, & *Columbia Plateau*, 73-4179
- rifts, *Hawaii*, orientation and growth, 73-961
- rocks, acid, chem. "fingerprinting", 73-3857; anorogenic suites, chem. discontinuity near basalt-andesite transition, 73-2013; Archaean, orientation indicated by ash:chert ratio, 73-2955; orogenic, limits of sediment involvement in genesis, 73-2982; peralkaline silicic, Mo in primary crystallization, 73-3804; P_{total} , $P_{\text{H}_2\text{O}}$ & occurrence of cummingtonite in, 73-4203; silicic, mobility of U & Th, 73-1657; TiO_2 content classification, 73-2680; ultra alkali, melting relations, 73-1525; *Antarctica*, petrog., 73-965
- Volcanic rocks, *Antarctica*, Sr isotopes in, 73-2684, 2685; *Argentina*, chem. anal., relation to tectonic movements, 73-923; *British Solomon Is.*, petrol., 73-3093; *Canary Is.*, evolution of *La Palma*, 73-955; *Chile*, chem., petrol., 73-922; *Crimea*, Triassic, 73-888; *Czechoslovakia*, petrol., 73-869; *Devon*, Permian K-rich, geochem., 73-515; *England*, age, 73-2196; *Fiji*, geol., 73-2062; *Europe*, Cretaceous-Pleistocene province, 73-865; *France*, age, 73-2198; *Germany*, Tertiary, genesis, 73-3083; *Greece*, calc-alkaline, petrol., 73-870; *Hawaii*, geol., 73-2064, chem., 73-2065; *Iceland*, petrog., 73-954, RE in, 73-1672; *Japan*, O isotope variations in magmatic differentiation processes, 73-3803; *Kenya*, K/Ar ages, 73-1122; *Mexico*, alteration to endellite, 73-204, petrog., 73-921, opaque min., 73-3055; *New Zealand*, K/Ar ages, 73-1133; *Pacific Ocean*, from deep sea cores, petrog., 73-2990, Pb isotopes in, 73-2063; *Queensland*, age, 73-1131; *South Africa*, evolution of Onverwacht group including "komatiites", 73-884; *South African continental shelf*, early Tertiary, petrog., modes, age, 73-873; *S. Australia*, petrog., 73-3044; *Sweden*, age, 73-2189; *Taiwan*, petrochem., 73-899; *Tasmania*, Cinozoic, petrog., 73-3094, geol., chem. anal., 73-3048

Volcanic rocks, (contd.)

— sublimates, Br/Cl ratio in, 73-3788

Volcanism, at destructive plate margins, 73-4085; Eocene, & origin of Horizon A in Atlantic sediments, 73-1004; island, model, 73-3077; *Antarctica & Chile*, Caineozoic, structural & petrol. characteristics, 73-951; *Russian SFSR*, Quaternary acid, 73-2047Volcanoes, on postage stamps, 73-3267, *Iceland*, intraglacial, 73-2049Volcano-plutonic association, *France*, 73-2198

Voltaite, crystal structure, 73-3496

Vosges v. France

Vrbaita, crystal structure, 73-233, 1332

*Vredfort v. S. Africa**Vulcano I. v. Italy**Yskova, Ukraine v. USSR**Vysoky Jeseník Mts. v. Czechoslovakia*

Wad, Ontario, 73-3562

*Wadi Dabbah v. Egypt**Wadi El Miyah, Eastern Desert, v. Egypt**Wadi Husainiya v. Iraq**Wadi Kariem v. Egypt**Wah Wah Pass, Utah v. USA*

Wairakite, new data on series with analcite, 73-726

*Wairere v. New Zealand**Waitaki valley v. New Zealand**Wakamiya-cho, Fukuoka v. Japan**Wake County, N. Carolina v. USA**Waldviertel v. Austria*

WALES, Cambrian slate belt, strain values, 73-4092; galena in Mesozoic sedimentary rocks, origin, 73-1883; heavy metal content of some rivers & lakes, 73-2730; min. resources, 73-1371; north, Migneint area, Cambrian & Ordovician geol., 73-4099;

—, ANGLESEY, Precambrian glaucophane schist, ocean floor basalt affinity, 73-4100

—, CAERNARVON, Conway, diagenetic polyframboidal pyrite, 73-971; *Dwygyfylchi-Dolgarrog*, Ordovician geol., 73-1973; *Llwyn Peninsula*, acid intrusions, geochem., 73-1661

—, CARDIGAN, deposition of sulphides on faults & breccia zones, 73-243

*Wallace County, Kansas v. USA**Wallaway, S. Australia v. Australia**Walnut Wells, New Mexico v. USA**Waltham, Quebec v. Canada**Walton's Wood, Staffordshire v. England**Walvis Ridge, v. Atlantic Ocean**Ware, B.C. v. Canada**Warrambungle volcano v. Australia*

Warwickite, -type structures, 73-2417

*Wash v. England**Washington v. USA*Water, -CO₂ mixtures, non-ideality effects, 73-2545; determination of chloride ions, 73-3329; in ore-dressing, recovery & re-use, 73-557; insoluble particle behaviour on freezing, 73-1505; interstitial, from continental shelf sediments, chem. changes, 73-3849; interstitial, chem. composition, 73-3691; O isotope exchange with quartz, 73-555; role of coagulation in sedimentation, 73-2071; solubility in analcite & nepheline univariant melts 73-3752; superheated to 279.5°C, 73-2544; vapour pressures table, 73-313; *India*, resources, 73-3645—, ground-, dolomitization by, 73-1723; ionic activities in, 73-2727; migration patterns of Nb, 73-1719; *Brazil*, origin of mineralization, 73-1724; *Canada*, hydro-geochemistry, 73-1709, 1710; *Colorado*, Au content, 73-552; *England*, entry of radon into, 73-1714; *France*, with low salt concentrations, 73-1722; *Kazakhstan*, role in genesis of hydrothermal deposits, 73-2725; *Poland*, in Tertiary rocks, chem., 73-3845; *USA*, north-west, quality in basalt, 73-2724; *Utah*, resources, 73-2527 —, lake, *Antarctica*, Sr isotopes in, 73-524 —, mineral, determination of sulphate, 73-3339; *Poland*, geol., 73-551—, river-, concentration control of soluble Cu, 73-2728; transverse diffusion of solutes, 73-3847; *Amazon*, chem., 73-1711; *Canada*, N.W.T., hydrogeochem., 73-2732, 2733; *Massachusetts*, organic compounds in, 73-1713; *New York*, concentration changes in metallic elems., 73-3846—, sea-, Br partition coefficients for precipitated halite, 73-1708; calcium carbonate monohydrate in, 73-388; diffusion into a dilute solution, 73-2731; flux of radon into atmosphere, 73-553; partial molal volume of CaCO₃ in, 73-384; salt exchange with air, 73-2723; silica-bicarbonate balance & early diagenesis, 73-2722; titration of sulphate, 73-3339; *South China Sea*, geochem. studies, 73-1707; *Yugoslavia*, in salt pans, geochem., 73-3850; also v. snowWavellite, magnified photographs of crystals 73-1203; visible & near-IR spectra, 73-1066; *Urals*, data, 73-1922; *Wisconsin*, geol. relations, X-ray crystallog., 73-798*Wawa, Ontario v. Canada*Weathering, & short-lived radionuclides, 73-3841; distinction of modern from relict profiles, 73-541; effect on organic matter in shales, 73-2708; geochemical mechanics of Al, 73-148; of diorite in humid temperate climate, 73-2706; profiles, H & O isotope systematics, 73-2716; *New England*, chemical, effect of atmospheric S on, 73-558; *New Guinea*, tropical, 73-3415; *Washington*, in alpine environment, 73-206Websterite, *Arizona & Utah*, xenoliths in kimberlite-bearing breccia pipes, 73-2045*Weddell Sea v. Antarctica*Weissite, *Russian SFSR*, X-ray powder data, reflectance, 73-1894Weloganite, *Quebec*, in silico-carbonatite sill, 73-507*Wernerite, Quebec, 73-1094**Werran Hills, v. Nigeria**Wesselton v. S. Africa**West Bengal v. India**West Farrington, N. Carolina v. USA*WEST INDIES, *Bahamas*, *Exuma Sound*, carbonate min. of sediments, 73-4299; *Barbados*, carbonate diagenesis in coral cap, 73-4300, submarine sedimentation of carbonate sediments, 73-4301; *Grenada*, calc-alkaline suite, petrogenetic model, 73-4170; *Haiti*, Terre-Neuve igneous province, petrol., 73-2008, & Massif du Nord, 73-2010; *Jamaica*, *St. Andrews*, origin of gypsum-anhydrite rocks, 73-2526; *Lesser Antilles*, basalt magma composition, origin differentiation, 73-2009; *St. Vincent*, *Soufriere volcano*, 1971-72 eruption, 73-4219, activity in late 1971, 73-2068, ejected plutonic blocks, min., 73-3098, petrol., 73-3099; *Trinidad*, *Port of Spain*, geol., 73-3014*West Virginia v. USA**Western Australia v. Australia**Western channel, N.W.T., v. Canada**Western Mines, Vancouver I., B.C. v. Canada**Westland v. New Zealand**Westmann Is. v. Iceland**Westmorland v. England*

Wet-sieving, ultrasonic disruptor as aid to, 73-2251

*Wetumpka, Alabama v. USA**Whin Sill v. England**White Bay, Newfoundland v. Canada**White Creek, B.C. v. Canada**White I. v. New Zealand**White Mountain, New Hampshire v. USA**White Pass, Washington v. USA**White Pine, Michigan v. USA**White Pine County, Nevada v. USA**White Well, W. Australia v. Australia*Whitlockite, structural relationship with β -Ca₃(PO₄)₂, 73-2432*Whitwell, Derbyshire v. England**Wiborg v. Finland**Wittenoom Gorge, W. Australia v. Australia**Wicklow v. Ireland*Wickmanite, *Norway*, first occurrence, 73-1083

Wightmanite, drainpipe structure, 73-3492

*Wildcat Canyon, Oregon v. USA**Willamette Valley, Oregon v. USA*Willyamite, *New South Wales*, redefined, 73-4063*Wilson Mineral Springs, Arkansas v. USA**Wind River, Wyoming v. USA**Wisconsin v. USA*

Witherite, manometric determination, 73-4067

Wittichenite, Sb analogue, 73-2591; *Norway*, in hydrothermal quartz veins, 73-1888; *Poland*, in ores, 73-3535; *Virginia*, 73-1096*Witwatersrand v. South Africa**Wlén, Gory Kaczawskie Mts. v. Poland**Wloclawek v. Poland*Wodginite, *Manitoba*, opt., chem. data, 73-2888

Wolfeite, Mössbauer studies, 73-1339

Wolfgram deposits, *Austria*, geol., 73-256; *Uganda*, structural control, 73-1421Wolframite, *Cornwall*, Mn/Fe ratios, 73-1911, 1912; *Egypt*, vein with Au, 73-3599; *France*, structure of deposit, 73-3591; *Portugal*, vein occurrences, 73-1985; *Tasmania*, regional variation in composition, 73-3546Wollastonite, *India*, stability in granulite facies, 73-4340*Wondrebs, Bavaria v. Germany**Woodcutters, Northern Territory v. Australia**Wright Valley v. Antarctica*Wulfenite, magnified photographs of crystals, 73-1203; relation of structure & crystal morphology, 73-1324; *Arizona*, specimens, 73-3247, 3248; *Iran*, in Sorbonne collection, 73-3266; *New Mexico*, 73-3252

Wurtzite, hydrothermal synthesis, 73-379; Mössbauer parameters for Fe(II) in, 73-3483; -spherulite equilibria & stoichiometry, 73-1554

Wüstite, formed below 570°C, Mössbauer study, 73-3478

*Wyoming v. USA*Xenoliths, in kimberlite pipes, petrol., abyssal origin, 73-814; *Kansas*, in kimberlite, 73-2043; *Tanzania*, alkalic pyroxenite in volcanic rocks, 73-3033; *Virginia*, schistose in granite, 73-2151

Xenon, lunar, solar flare effects in, 73-619; record of extinct radioactivities in Earth, 73-472

— isotopes in carbonaceous chondrites, 73-3974; *Greenland*, in anorthosite, 73-512

- Xenotime, solid solution with chervonite, 73-4072
- Xonotlite, *Japan*, associated with jadeite, 73-1814; *New Jersey*, 73-4370; *New Zealand*, from alteration of gabbro, chem. anal., 73-4005
- X-ray absorption analyser, to determine U in ion-exchange plants, 73-3352
- analysis, hazards & safety recommendations, 73-3342; on-stream energy dispersive, 73-3349; preparation of oriented slides of clay mins., 73-2256
- cameras, MRC high pressure, improvement of exposing principle, 73-2259
- diffraction, & simultaneous DTA, 73-37; clay min. mounting techniques for anal., 73-3313; identification of patterns of unknown substances by computer, 73-2257; low thermal gradient high-T furnace, 73-35; polychromatic, for high PT studies, 73-1154; preparation of orientated clay min. specimens for anal., 73-1215; quantitative determination, of carbonates in greenschist facies rocks, 73-2253, of calcite-dolomite-apatite mixtures, 73-2254; randomly orientated powders for quantitative determination of clay minerals, 73-1214; recording low-T photographs, 73-3312; sample changer for oriented clay aggregates, 73-3317; simple heating stage, 73-1158; techniques for diagenesis studies & low rank metamorphism in humid sediments, 73-4228
- diffractometer, high-P unit, 73-3315; simple heating stage, 73-3371
- energy dispersive analyser used with SEM for quantitative anal., 73-3350
- fluorescence, analysis by fusion method of complex base-metal ores, 73-1178; analysis of metal alloys, technique, 73-3351; analysis of Ni, Ga, Ge in Fe meteorites, 73-2283; Apollo 16 geochem. experiment, 73-605; comparison of P in standard rocks, 73-2292; determination of Cl in standard silicate rocks, 73-1177; determination of Na in silicate standards, 73-2285; determination of Si in silicates, 73-2289; determination of some tr. elems. in geochem. standards, 73-1736; die for pelletizing samples, 73-1176; double concentration method, 73-2281; effect of prolonged irradiation on lithium tetraborate glass discs, 73-3346; evaluation of matrix effects, 73-2284; for on-stream anal. of sulphide ore fractions, 73-2282; isotope-excited anals. for Nb, Zr, La + Ce in alkaline rocks, 73-1180; mass absorption applied to min. & rock anal., 73-1179; mechanised sample preparation of oxide material, 73-2291; new method of flux-fusion for silicate rock anal., 73-67; procedures for anal. of metallurgical slags, 73-2286; quantitative anals., borax fusion technique, 73-3343; rapid fusion technique, 73-2280; use of Ekco mineral analyser to determine Cu and Zn in presence of Fe, 73-69
- spectrometry, anal. of aluminosilicates, 73-2288; quantitative determination of minor Nb & Ta, 73-3348
- monochromator, synthetic corundum as, 73-2295
- phase analysis, of powdered samples, determination of diffraction background, 73-36
- radiography, techniques for thin rock slabs, 73-3316; with X-ray diffraction equipment, 73-2255
- spectra calculator, 73-2290
- spectrographic analysis, for Fe, Ti, Ca, K, Si, Al in silicate rocks, 73-66
- spectrometry, determination of major elems. in silicate rocks, 73-3344; quantitative anal., computer programme, 73-2293; recent developments in crystal anal., 73-2294; silicates, techniques, 73-68
- X-ray Spectrometry, new journal, 73-1176
- topography, of large crystals, 73-34
- Yamakata, Ibaragi v. Japan*
- Yamashirocho, Saga v. Japan*
- Yavapaiite, crystal structure, 73-1326
- Yazoo County, Mississippi, v. USA*
- Yellandlapad, Andhra Pradesh v. India*
- Yellowknife, N.W.T. v. Canada*
- Yellowstone National Park, Wyoming v. USA*
- Yeoval, N.S.W. v. Australia*
- Yilgarn Block, W. Australia v. Australia*
- Yinnabin v. Burma*
- Yorkshire v. England*
- Yosemite Valley, California v. USA*
- Yttrium, chemical field tests for detection, 73-570
- Yttrifluorite, *Japan*, chem. anal., 73-804
- Yttrium deposits, *China*, 73-2537
- Yucatan v. Mexico*
- Yucatan Channel v. Caribbean Sea*
- Yukon v. Canada*
- YUGOSLAVIA, Dinaride ophiolite zone, amphibolites associated with alpine-type ultramafic rocks, min., 73-3177; *Ginovci*, bentonite, min. and chem. comp., 73-195; *Seovlje*, sea-water in salt pans, geochem., 73-3850; *Trepča*, min. specimens, 73-4362; *Trstenik*, sedimentary Fe ore, with Ni & Cr, chem., min., 73-258
- Zacatecas v. Mexico*
- ZAIRE, age of granites in Kibarian belt, 73-3288; Bushimay System, sedimentology, 73-4261; *Katanga*, age of uraninites, 73-2205, anomalous ages of lavas, 73-2206, bequerelized specimen in Sorbonne collection, 73-3266, Mn ore deposit, min. & sedimentology, 73-2299, *Kamoto*, diagenetic ore forming processes, 73-2299, fluid inclusions in dolomite, 73-4093; *Kasai*, gneisses, U/Pb, & Rb/Sr ages, 73-2207; *Mongwalu district*, Au mineralization, origin, 73-3601; *Nogui*, age of granite, 73-2208; *Nyiragongo lava lake*, melilite nephelinite, melting relations, 73-1525; *Shaba (Katanga), Mindigi*, heterogeneity polypitism, 73-2942
- Zalingei, Darfur v. Sudan Republic*
- ZAMBIA, archaeological radiocarbon dates, 73-1135; Mpanshya metamorphic group, geol., 73-2137; *Chibuluma*, Co variation in pyrite, 73-757, geol., palaeogeog. of ore body, 73-1423; *Luangwa Bridge*, non-metamict allanite, 73-1804
- Zarechenskoye, Rudnyy Altai, Russian SFSR v. USSR*
- Zawar, Rajasthan v. India*
- Zawiercie v. Poland*
- Zeleznye hory Mts., Bohemia v. Czechoslovakia*
- Zeolites, alkalinity and formation in saline alkaline lakes, 73-731; as catalysts for synthesis of amino acids & purines, 73-3763; home laboratory identification tests, 73-1173; influence of framework charge density on ion-exchange properties, 73-1316; Li-, Na-, K-, Cs-X, water adsorption, 73-1621; location of cations by IR & Raman spectroscopy, 73-1317; sodium type A, formation from kaolin mins. using NaOH, 73-447; type X, dehydrated Ca-exchanged, crystal structure, 73-2397; *Iceland*, formation in geothermal area, 73-1005; *Nevada*, diagenesis from vitric material in tuffs, 73-3142, *Oregon*, geol. of deposits, 73-1861; *USA*, in neritic bar sand, 73-2866; *Utah*, occurrence, IR anal., 73-4035; *Virginia*, occurrence, 73-3246; *Wyoming*, economic potential, 73-1489
- Zeolitization, *New South Wales*, mins., 73-1996
- Zeophyllite, *Bohemia*, crystal structure, 73-2384
- Zerhamra v. Algeria*
- Zhuravka Russian SFSR v. USSR*
- Ziarat v. Pakistan*
- Zillertal v. Austria*
- Zinc, AAS determination, 73-1164; determination in interstitial water by AAS, 73-3335; determination in presence of Fe, 73-69; in granitic biotites, 73-692; isotopic & elemental abundance, 73-576; *Atlantic Ocean*, in deep-sea sediments, 73-1683; *Canada*, geomathematical evaluation of area, 73-284; *Colorado*, mining map, 73-1403; *E. Africa*, in lake water, 73-499; *Montana*, mining, 73-1401; *New Mexico*, resources, 73-3587; *Pennsylvania*, geochem. prospecting 73-568; *Turkmenia*, movement in brine, 73-1721; *Wales*, resources, 73-1371; *Wisconsin*, dispersion in Pb-Zn district, 73-492, geochem. prospecting, 73-3860
- Zinc compounds, Li-Mg-Zn silicates, crystallization, 73-1581; oxide, crystal growth 73-322, oxide, formation of dislocations in crystals, 73-321, structure modification, 73-3701; ZnS, epitaxial growth on sapphire, 73-329; high-order polytypes, identification, 73-1284, 1287, polytype formation, 73-1283, recrystallization & structural transformation, 73-1288, tilt & structure transformation, 73-1286, hollow single crystals, 73-328, *Poland*, colloidal transport phenomena, 73-1419
- deposits, *Alaska*, geol., 73-1382; *Appalachians*, distribution, 73-1394; *Czechoslovakia*, petrol., 73-257; *Egypt*, geol., 73-3597; *New South Wales*, geol., 73-3611; *Norway*, fluid inclusion studies, 73-1412; *Sardinia*, karst concentration, 73-3533; *S. Australia*, 73-2480; *Tennessee*, 73-1461, fluoride inclusion studies, 73-1388, structures, 73-1395
- ores, *Bulgaria*, flotation, 73-3595
- Zinnwaldite v. mica*
- Zirbulak Mts. v. USSR*
- Zircon, accessory, new typology, 73-1787; determination of Pb, 73-1165; detrital, supergene leaching in weathering of basaltoid rocks 73-2705; experimental error in crystal shape measurements, 73-1784; extraction of U & Th for age determination, 73-3269; fission track annealing, 73-341; representation of morphological characteristics in rocks, 73-1785; synthesis, effect of MgF₂ on, 73-399, effect of NaF on, 73-398; *Alps & Bohemian massif*, detrital, age & origin, 73-3283; *Cambodia*, fission-track age, 73-3290; *Czechoslovakia*, in stream sediment, 73-1903; size & pleochroic haloes in granitoid rocks, 73-3982; *Ghana*, in pegmatite, 73-1816; *India*, derivation in granitic rocks, 73-649, radioactivity, 73-650, stability in Central Gneisses, 73-648; *Ireland*, growth from minor acid intrusives, 73-3981, growth trends in Leinster granite, 73-2801,

Zircon, (*contd.*)

unusual, in granite 73-3980; *Italy*, in sediments, provenance, 73-4108; *Maine*, variation in granite, significance, 73-2039; *S. Dakota*, 73-2538; *W. Australia*, economic concentrations, 73-992; *Wyoming*, in Precambrian gneiss, 73-1450

Zirconium, in alkaline rocks, isotope-excited XRF, 73-1180; *Quebec*, in silico-carbonatite sill, 73-507

Zircophyllite, *Russian SFSR*, Zr analogue of astrophyllite, 73-2951

Zirkelite, -jordisite min. paragenesis, 73-1365

Zloty Stok, v. Poland

Zoisite, blue, impurities in, opt., microwave spectroscopy, 73-2819; ordering of V^{2+} , Mn^{2+} , Fe^{3+} ions, 73-220; paramagnetic ions in, 73-221; *Bavaria*, in eclogite, chem., 73-2818; thulite, *Japan*, associated with jadeite, 73-1814

Zoning in minerals, study by X-ray spectral microprobe anal., 73-760

Zorite, *Russian SFSR*, new min., 73-4081

Zunyite, Al/Si distribution in, 73-231; comparison of neutron- & X-ray diffraction studies, 73-2398

Zussmanite, *California*, 73-4373

Zwieselite, Mössbauer studies, 73-1339

Zwitter, *Mongolia*, Sn-ore metasomatite, geochem., 73-2499

Mineralogical Abstracts

The Mineralogical Society of Great Britain and the Mineralogical Society of America are the joint publishers. The periodical can be obtained directly from the Publications Manager, Mineralogical Society, 41 Queen's Gate, London, SW7 5HR, or through any bookseller.

Annual Subscription for one calendar year of four issues and the index number, post free: U.S. \$36 or £14.00.

Back Numbers: volumes 1-13 of *Mineralogical Abstracts* were issued only with the *Mineralogical Magazine* (volumes 19-31) and are not available separately. With the exception of a few which are out of print, back numbers of the *Magazine* containing *Abstracts* are available at U.S. \$4.60 or £1.75 per number. Volume 14 onwards of *Mineralogical Abstracts* are available separately at U.S. \$4.60 or £1.84 per number.

Members and Fellows of the Mineralogical Society of America and Members of the Mineralogical Society of Great Britain may purchase the four numbers for any year from 1959 onwards for their personal use at U.S. \$10.00 or £3.75, post free. This special rate does not apply to single numbers.